

HUMAN LIFE IS THE STATE'S GREATEST ASSET

FLORIDA



HEALTH NOTES

OFFICIAL MONTHLY BULLETIN

ESTABLISHED JULY, 1892

STATE BOARD OF HEALTH
JACKSONVILLE, FLORIDA

Entered as Second Class Matter, October 27, 1921

at the Postoffice at Jacksonville, Florida, Under the Act of August 24, 1912

This Bulletin will be sent to any address in the State free of charge.

Vol. 26

JANUARY, 1934

No. 1

Edited by

STEWART G. THOMPSON, D. P. H., Member
American Medical Editors' and Authors' Assn.

ARTICLES

SOCIAL HYGIENE—*Brink*

YOUR RESPONSIBILITY—*Eaton*

BUILDING FAMILY RECORDS—*Thompson*

HEALTH CONSERVATION CONTEST—*Hanson*

OBSERVATIONS ON MATERNAL MORTALITY—*Murphy*

HENRY HANSON, M. D., STATE HEALTH OFFICER

Also Executive Officer and Secretary of Board

BOARD MEMBERSN. A. Baltzell, M. D., Pres.
MariannaHarry Dash Johnson, M. D.
Daytona BeachR. L. Hughes, M. D.
Bartow**STATE HEALTH OFFICER**Also Executive Officer and Secretary of Board
Henry Hanson, M. D.**BUREAUS AT JACKSONVILLE****DIRECTORS**

Laboratories.....	Paul Eaton, M. D., D. P. H.
*Vital Statistics.....	Stewart G. Thompson, D. P. H.
Communicable Diseases.....	F. A. Brink, M. D.
Engineering.....	Louva G. Lenert
Accounting.....	G. Wilson Baltzell
Librarian.....	Elizabeth Bohnenberger
*Registration Inspector.....	Anna C. Emmons
Drug Store Inspector.....	M. H. Doss
Assistant Drug Store Inspector.....	Frank S. Castor

LABORATORIES

Jacksonville.....	Pearl Griffith, B. E.
Miami.....	E. R. Powell
Pensacola.....	Johnette McCormick
Tallahassee.....	Estelle Bryan
Tampa.....	H. D. Venters, B. S.

MEDICAL OFFICERS

Inverness.....	Leland H. Dame, M. D.
Jacksonville.....	W. A. Claxton, M. D.*
Jacksonville.....	T. E. Morgan, M. D.
Marianna.....	E. R. Marshburn, M. D.
Tallahassee.....	H. A. McClure, M. D.
Tampa.....	C. W. Pease, M. D.
West Palm Beach.....	C. W. McDonald, M. D.

*(And Tuberculosis Clinician)

DISTRICT SANITARY OFFICERS

Jacksonville.....	George W. Hulvey
Marianna.....	C. A. Holloway
Orlando.....	Russell Broughman
Tampa.....	Frank Pauley
West Palm Beach.....	S. D. Macready
On "C. W. A." Duty.....	Fred A. Safay
On "C. W. A." Duty.....	T. S. Kennedy, M. D.

PUBLIC HEALTH NURSES

Jacksonville.....	Joyce Ely, R. N. (Acting Chief)
Ft. Pierce.....	Annie Gabriel, R. N.
Jacksonville.....	Johanna L. Sogaard, R. N.
Marianna.....	Lalla Mary Goggans, R. N.
Tampa.....	Julia O. Graves, R. N.

MALARIA RESEARCH

Tallahassee.....	Mark F. Boyd, M. D. (Rockefeller Foundation)
------------------	---

MALARIA CONTROL STUDIES

Jacksonville.....	T. H. D. Griffiths, M. D. (U. S. Public Health Service)
-------------------	--

CONSULTANT IN ENTOMOLOGY

Orlando.....	W. V. King, Ph. D. (U. S. Bureau Entomology)
--------------	---

DIRECTORS FULL TIME COUNTY HEALTH UNITS

Tallahassee, Leon County.....	L. J. Graves, M. D.
Pensacola, Escambia County.....	W. A. McPhaul, M. D.

ADMINISTRATION**Henry Hanson, M.D., State Health Officer****HEALTH CONSERVATION CONTEST**

The attention of towns and cities in Florida, eligible to enter the Health Conservation Contest, is invited to the fact that a free survey may be had by writing promptly to Dr. Carl E. Buck of the Committee on Administrative Practice of the American Public Health Association, 450 Seventh Avenue, New York, N. Y.

**DITCHING AND CIVIL WORKS ADMINISTRATION
PROJECTS**

Health Notes wishes to remind all who have in mind ditching and drainage to consult the Chief Engineer of the State Board of Health before going ahead with such projects. It is also suggested that the State Geologist should be consulted in regard to influence of drainage on the underground water table. As a mosquito control measure, it is not desirable to drain all ponds or even all marsh areas. There are ponds where better results will be obtained by simply cleaning the edges and keeping them free of floatage or grass, thereby eliminating the favorable places for the Anopheles or other mosquitoes to lay their eggs. If indiscriminate drainage is practiced in the enthusiasm for giving people work there is real danger of affecting the underground water table in this State to such an extent that harm instead of benefit will be caused in many areas.

Be sure to know what you are doing before you proceed.

BUREAU OF COMMUNICABLE DISEASES**F. A. Brink, M.D., Director****SOCIAL HYGIENE**

Mrs. Margaret Wells Wood, staff lecturer of the American Social Hygiene Association and an able public speaker, spent more than a month in Florida late in the year 1933 under the auspices of the Federation of Parent-Teacher Associations, speaking before clubs, school groups, social workers, etc., in the interest of social hygiene. She defined the term, social hygiene, as "guidance and control of the mating instinct so that the family shall be preserved." It is obviously impossible to include in such a brief phrase all the aspects and ideas embodied in the broadest use of the term. Certain it is that one of its objects, perhaps the most important one, is to prevent the spread of venereal diseases and minimize their dire consequences.

Unlike infantile paralysis which strikes terror to the hearts of parents and whose source is rarely determined, the venereal diseases are too often taken for granted, their gravity underestimated, their

BUREAU OF COMMUNICABLE DISEASES

source and manner of spreading well known. For the person of average intelligence, therefore, the avoidance of infection is largely a matter of individual responsibility. Exceptions are found in the wife or husband, innocently infected by a diseased mate; children with congenital infection, and a few others infected innocently by extragenital contact or by objects recently soiled with infectious discharges.

Educational guidance of our youth will go a long way toward preventing the venereal diseases with their disfiguring and damaging results. At least, education puts the responsibility where it belongs—on the individual. Treatment and cure of patients is the next preventive measure. It is a joint responsibility of the individual and the community, for there are many who cannot finance the necessary treatment. Always, the objective of treatment should be to effect a complete cure, but any treatment tends to decrease the danger of transmitting infection.

Vigorous supervision of prostitution will undoubtedly diminish the number of exposures and infections and this is certainly the business of local authorities. The laws of Florida provide adequately for punishment of persons who expose others to venereal infection and for requiring infected persons to submit to treatment. For lack of public sentiment, this law like many others is not enforced. For the same reason, there has been no appropriation for furthering the work under discussion. With \$25,000 a year with which to employ trained workers and organize a thoroughgoing social hygiene program, much could be accomplished to mold public sentiment, develop a more healthy attitude and interest among our people, provide treatment for those needing it and, most effective and important of all, teach our young people what they should know about this problem. All this would make for better law enforcement and a more wholesome environment for our children and youth. Even a much larger sum of money could be used to advantage and, on the other hand, something could be accomplished with a less amount. Any state appropriation should and probably would be supplemented by local funds and local effort.

During 1933, the Florida State Board of Health distributed 4,235 pamphlets dealing with social hygiene and venereal disease control and approximately 2,000 ampules of neoarsphenamine for the use of physicians in treating indigent syphilitics. An institute for negro physicians was held in Jacksonville by Dr. Walter Clarke of the American Social Hygiene Association in coöperation with the State Board of Health. Ten negro doctors registered for the institute and nine local specialists participated. By lectures and demonstrations, the methods of diagnosing and treating the venereal diseases were taught.

BUREAU OF COMMUNICABLE DISEASES

One county and two municipal venereal disease clinics are in operation in the State and the two county health units include control measures in their program. One, the Escambia County unit, supervises the city-county clinic for indigent sick in which venereal patients receive treatment.

The Bureau of Child Hygiene in the State Board of Health is holding institutes for midwives where each midwife has a blood test for syphilis and this is followed up so that treatment is provided where needed. The midwives are required to use silver nitrate in the eyes of the newborn, and are pledged to use their best effort to see that the expectant mothers they are engaged to attend have blood tests.

The State Board of Health Laboratories test annually about 100,000 blood specimens for syphilis and 12,000 smears for gonococcus infection.

Doctor and Patient

No physician can do his best for a venereal disease patient who does not coöperate—who does not carry out his instructions to the letter. Proper diet, exercise, rest and regular visits to the doctor are as important as the drugs or other form of treatment, often more important. Many patients, because of financial difficulties or indifference, or both, cease going to the doctor and abandon treatment when relieved of their discomfort or incapacity, but before they are cured. They may expect trouble later, the full realization of which would most certainly cause them to continue treatment.

Many doctors take time to explain to their patients the importance of complete cure and the consequences of neglect, while some few do not even disclose the nature of the ailment.

Reporting of venereal diseases is required by statute. Names of patients may be omitted from the report cards which are furnished, together with penalty envelopes in which they must be sealed and mailed. These reports are confidential and are disclosed to no one, but used for epidemiological study. Special investigations that have been made in various parts of the United States indicate that about 1% of all the people are under treatment for venereal diseases all the time, and that 5% to 10% are infected. The venereal disease problem is a stupendous one but, as stated, prevention and cure are largely the responsibility of the individual. Education and protection, the most important control measures, are functions of state and local governments. Treatment is the function of the practicing physician.

A most earnest group of men and women have organized themselves into a group known as the Florida Social Hygiene Council, the purpose of which is to promote social hygiene and venereal disease control in the State. It strives to organize volunteer effort.

BUREAU OF COMMUNICABLE DISEASES

promote educational measures, make suitable reading material available, crystallize and utilize public opinion and strengthen the work of any official agency for the betterment of mankind. This organization should have a large membership and wield a strong influence for good.

BUREAU OF LABORATORIES

Paul Eaton, M.D., D.P.H., Director

YOUR RESPONSIBILITY

As I write these lines, the whole State is expressing its sympathy for the bereaved families of the victims of a peculiarly horrible accident in which ten children lost their lives. And there is loud outcry to the effect that something should be done to prevent the recurrence of such accidents. Investigation, penalties, supervision and other measures are being talked about.

During 1932, more than eight times as many persons died of diphtheria as were killed in the Crescent City accident. We know the cause of diphtheria, and better yet, we have a practically perfect means of protection against the disease. This protection is within the reach of almost every child in Florida. Those parents who can afford to pay a private physician to administer the treatment ought to be as much ashamed of asking a public official to do the work free, as they would be of asking the county commissioners for a free turkey and a basket of groceries at Thanksgiving time. Those whom the vicissitudes of fortune have put in such a condition that they cannot pay for such treatment should feel no loss of self-respect in accepting the free services provided by the State or by some local agency. Any parent or guardian who neglects this procedure is subjecting the children under his care to an unnecessary risk.

On the basis of what happened in 1932, let us put the persons who are going to die in 1934 in Florida, in motor buses, and stall these buses on railroad tracks where fast trains will be sure to hit them. How many buses will we need?

Diseases	Deaths in 1932	Buses Needed as Described
Diphtheria	83	8
Malaria	233	23
Pellagra	199	20
Tuberculosis	1093	109
Typhoid Fever	85	8

BUREAU OF LABORATORIES

The buses are stalled and the trains are on the way. If you saw a bus load of people in such danger, would you warn them or would you stand back and wait for some official agency to do so?

SUMMARY OF WORK DONE IN THE LABORATORIES OF
THE STATE BOARD OF HEALTH DURING THE
MONTH OF NOVEMBER, 1933

	Jacksonville	Tampa	Pensacola	Miami	Tallahassee	Total
Animal Parasites	1931	1621	531	123	261	4467
Diphtheria	1692	2189	86	923	34	4924
Typhoid	855	158	44	36	23	1116
Malaria	844	266	50	27	192	1379
Rabies	10					10
Tuberculosis	205	147	20	59	11	442
Gonorrhea	633	251	34	132	71	1121
Kahn (Syphilis)	4071	2575	280	1671	197	8794
Water		65	41	184		290
Milk	281	491	41	436	63	1312
Miscellaneous	234	10	17	167	7	435
	10756	7773	1144	3758	859	24290

Specimen containers distributed..... 9076

BIOLOGICAL PRODUCTS DISTRIBUTED

Diphtheria Antitoxin	10,000 units	139 Packages
	5,000 units	45 Packages
Schick		6370 Tests
Toxoid		4908 C. C.
Toxin Antitoxin		901 C. C.
Typhoid Vaccine		1779 Treatments
Vaccine Virus		3120 Capillaries
Antirabic Virus		12 Treatments
Tetanus Antitoxin	1,500 units	7 Packages

ALL REQUESTS FOR BIOLOGICAL PRODUCTS SHOULD
BE DIRECTED TO THE STATE LABORATORY
STATE BOARD OF HEALTH
JACKSONVILLE, FLORIDA

BUREAU OF VITAL STATISTICS**Stewart G. Thompson, D.P.H., Director****BUILDING FAMILY RECORDS**

Annual Roundup of birth and death certificates has been our slogan the first of each year since January, 1917. Each local registrar is urged to round up all delayed certificates for the calendar year 1933.

Local Registrars have been doing splendid work in the five hundred districts in the state to hold the standard of registration up to par. Each local registrar is requested to check very carefully his entire district and rush to Jacksonville all delayed certificates with his December report which is due January 10th.

Registration Affairs in Florida were again checked by Dr. T. F. Murphy, Chief Statistician for Vital Statistics of the United States Bureau of the Census, Washington, D. C., and those persons responsible for filing records of births and deaths should feel highly pleased with the complimentary statements made by Dr. Murphy.

County Judges will be interested to learn that last year, original marriage license records in a Florida county were lost when a court house burned. The judge of this county bought a new book and made a trip to Jacksonville where he copied the information from his own original marriage licenses from the midyear of 1927 to date.

Clerks of Circuit Courts forward monthly information concerning divorces and annulments granted. These records are housed by the State Board of Health in Jacksonville and an alphabetical index maintained for ready reference.

County Judges and Clerks of Circuit Courts in Florida, with a few exceptions, have heartily coöperated in the operation of the law requiring centralization of marriage and divorce records. This central file which is available to citizens of Florida, is used daily and has proven to be very valuable and important on occasions where the saving of time or money is essential. Sincere appreciation is extended at this time to the county judges and clerks of circuit courts

BUREAU OF VITAL STATISTICS

in Florida who have coöperated in making available this centralized state record.

Certified Copies of marriage and divorce records are not issued by the State Board of Health except on special occasions. It is assumed that the purpose of the law is to maintain a continuous alphabetical index of the brides and grooms and names of individuals securing a divorce or annulment. The State Board of Health urges anyone desiring a certified copy of a marriage or divorce record to secure the same from the county judge or clerk of circuit court.

Marriage Licenses after being copied in the county records are forwarded to the State Board of Health by county judges each month. In addition to having an alphabetical index of all marriages in the state, as well as original licenses housed in one vault, each county judge retains a complete record for his own county. This important record being kept by the state and by the county in two separate places has proven to be a wise procedure. For instance, if a parent desires to know whether his son or daughter is married in Florida, the information may be secured from the centralized records of the State Board of Health and the expense and time required in writing to sixty-seven county judges is saved.

Your Part in building family records for the citizens of Florida is deeply appreciated.



SOME OBSERVATIONS ON MATERNAL MORTALITY*

T. F. MURPHY, M.D., F.A.P.H.A.

Chief Statistician for Vital Statistics, Bureau of the Census, Washington, D. C.

The diseases listed in the Manual of the International List of Causes of Death are arranged in 17 groups, and I believe that the data given under Group XI, "Diseases of Pregnancy, Childbirth and the Puerperal State," are the subject of more controversy than any other. The aim of this group is to include all deaths of women due to childbirth, and the word "puerperal" is used in the broadest sense to include all affections depending upon pregnancy, births, and also diseases of the breast during lactation. Many deaths compiled under other titles may be due to puerperal conditions; so the Bureau has adopted a policy of querying all cases, concerning which there may be a reasonable doubt. The morbid conditions within this group have a very deep sentimental appeal, and they form an endless subject of discussion and study by the prenatalists, obstetricians, gynecologists, advocates of birth control and many other groups. The number of deaths annually in the United States due to puerperal causes is so great that we are the objects of severe criticism. In many circles it is considered proper to ridicule the rates in this country when compared with those of foreign countries. Much of this criticism may be warranted, but, when our statistics are compared with foreign countries, it is due to a misunderstanding of the methods employed in compiling the data.

There are two methods of computing the maternal mortality rate—one, the number of women who have died from childbirth in any year in every 100,000 of the population. This maternal mortality rate, based solely on population, is very crude and very deceptive, as it gives no clue to the frequency of births. A far better method is to compute the maternal death rate on the number of live births, rather than on the population. On this basis, we obtain a more refined and comparable measure of the risks of childbearing.

Let us consider the method employed in this country to secure the information which enables a state or the Federal Government to compute maternal mortality. The standard certificate of death, which is now in general use in all of the states, asks for the principal cause of death and other contributory causes of importance. A number of years ago, approximately 40 per cent of the certificates had two or more causes on them, but due to the demand for more complete information this number has increased, until a recent count in

*Read before the Fifth Annual Meeting of the Florida Public Health Association, Inc., St. Petersburg, December 4-6, 1933.

the Division of Vital Statistics indicated that approximately 70 per cent of the certificates had two or more causes of death on them. These certificates are classified according to the Manual of the International List of Causes of Death, which is the basis for classification of deaths in practically all countries, and the Manual of Joint Causes of Death, its companion volume, which is essentially the product of the United States. Relative weights are assigned to different diseases, and, when two or more appear on a certificate, the death is assigned to the one with the greater weight.

It may be interesting to compare the standing of a number of states on the basis of the death rate from puerperal causes. Florida leads all other states with a death rate of 10.4. South Carolina, Georgia, Nevada, Louisiana, Wyoming, Arizona, North Carolina, and Mississippi, follow in the order named. It will be noted that all of these states have a very large colored population, with the exception of Nevada and Wyoming, whose Mexican population forms a trifle over 3.2 per cent of the total population of the State. The puerperal mortality for colored is highest in the states of Florida and Oklahoma, where the death rate from this cause is 15.4 per 1,000 live births, and Tennessee, Kentucky, South Carolina, North Carolina, and Virginia, all have a puerperal death rate among the colored of 11.5 or over. In a large majority of cases, the death rate among the colored exceeds that of the white from 20 to 80 per cent. It is evident, therefore, that the high mortality from puerperal causes is due, in a large measure, to the colored race, and until this situation is corrected, none of the states mentioned can hope to reduce the death rate from puerperal causes to any considerable degree. It would seem eminently desirable that a special study should be made, possibly through a supplemental questionnaire, to determine the reasons and correct, insofar as possible, this high death rate due to puerperal causes.

For the last year for which puerperal death rates are available, in foreign countries, they compare with the United States as follows: The rate in the United States was 6.6; that of Scotland, 5.9; Australia, 5.5; Chile, 6.8; Canada, 5.1; New Zealand, 4.8; and Northern Ireland, 5.1. I mentioned the fact that approximately 70 per cent of the mortality certificates received in our office had two or more causes on them, and that these certificates were classified according to the Manual of Joint Causes of Death. Several other countries use this manual, at least in part. This explanation is necessary in order to understand the results obtained in this country and in foreign countries when identical certificates are classified, for this large group of certificates with two or more causes determines the comparability of rates in this country and abroad. In order to determine how big a factor this represents, the Bureau of the Census sent to 24 foreign countries approximately 1,000 certificates on which maternal conditions were given as causes of death. Only 16 replied, but they furnished very illuminating information as to

the difference between the rates issued by them and by the United States. Of the 1,000 certificates, 400 gave as the cause of death a puerperal condition about which there could be no difference of opinion, and these certificates were naturally classified within the puerperal group. The remaining 600 had two or more causes of death, at least one of which was puerperal. Now let us see what happened in the different countries codifying these identical certificates. Denmark classified 97 per cent of these as puerperal; the United States, Australia, and New Zealand, 88 per cent; Scotland, 87 per cent; Italy, 84 per cent; and Norway only regarded 63 per cent as puerperal deaths. What an interesting picture this presents. With the exception of the United States, Australia, New Zealand, and possibly Scotland, the other countries are far apart in their decisions. Australia, Canada, and New Zealand use our Manual of Joint Causes of Death, and their rates are quite comparable with ours. France and Italy are widely separated. Why should Denmark classify 97 per cent of them as puerperal, while the nearby countries of Norway and Sweden classify only 63 per cent to the same cause, and even these two countries do not agree with one another? Why should England and Wales classify only 64 per cent of them as puerperal, while Scotland classified 87 per cent of the same certificates as puerperal in nature? Norway, Sweden, Denmark, and the Netherlands are all neighboring countries, and not one of them agrees with one another or with this country in the allocation of these causes of death. With this wide divergence of opinion in these 16 leading countries, as compared with the United States, may I ask why our maternal death rate is so often compared with that of foreign countries to our disparagement?

Another great difficulty which arises is the number of interpretations of what constitutes a live birth. In the United States a child is considered as born alive if he takes only one breath. In foreign countries the rule is far from uniform. In some, a child is not considered alive until it is baptized—a matter of two or three days. In others, a child born during the last few days of a calendar year is not registered as born until the beginning of the next year. This is done to grant him another year from military duty.

I am citing these facts to drive home a statement which I have made many times—namely, that in the realm of vital statistics the data issued by foreign countries are not comparable with those published by the United States, because we do not use the same basis in classifying our certificates. Bear in mind that this state-

ment is not offered as an excuse for the high maternal mortality which exists here, but no comparison with foreign countries is needed to make us realize that our situation is far from what it should be.

Let us analyze in a small way the conditions which make up the greater number of puerperal deaths. The four principal causes are puerperal septicemia, puerperal hemorrhage, accidents of pregnancy, and puerperal albuminuria, eclampsia and other toxemias. Of the 13,068 deaths assigned to puerperal causes in 1932, 4,845, or 37 per cent, were due to puerperal septicemia, which is the scientific name for blood poisoning or child-bed fever. When the birth registration area was established in 1915, the death rate from this cause was 2.39. In 1932, 18 years later, it was 2.35. Now, if this condition is the same as post-operative infection, the question is often asked, why can we not reduce the mortality from this cause in the same ratio as in our surgical cases? The next largest number of deaths, 3,133, was due to puerperal albuminuria, eclampsia and other toxemias. The death rate from this cause was 1.64 in 1915 and 1.52 in 1932, a slight reduction. These conditions, it is generally admitted, are caused by the development of toxemias in the fetus itself, or due to its presence in the mother. The statement is often made that a very large number of these mothers could be saved if they had the proper medical prenatal care. By this, it is not meant merely a single consultation between physician and patient, but a systematic examination by the physician at stated intervals during the entire period of the puerperium. Third in order is puerperal hemorrhage, which caused 1,372 deaths, and the death rate from this cause was practically the same throughout the entire 18 years for which the figures are available. The death rate due to accidents of pregnancy has remained practically the same for the last 10 or 12 years and represents approximately 10 per cent of the total number of deaths.

In a further effort to learn the reason for this high puerperal death rate, we must consider a subject for which it is impossible to secure accurate statistics, and the basis of our information represents the opinion of those obstetricians, social workers, independent investigators and others who are qualified to furnish information. It is that of abortions. The figures of the Census Bureau indicate that only 2,760 deaths were charged to this cause out of a total number of 13,000 deaths assigned to the puerperal state. In the hospitals and dispensaries in the City of New York the Department of Health recorded 2,568 deaths in 1929 and 2,313 in 1930 due to illegal abortions. It is the opinion of an eminent gynecologist that approximately 100,000 abortions are performed in that city annually. In the report of the Committee on Prenatal and Maternal Care of the White House Conference on Child Health and Protection, it is estimated that 700,000 abortions are performed annually in the United States and that there is every reason to believe that an increase in this number is taking place with each decade. Similar to the experience in other

civilized countries, it is the opinion of medical investigators that deaths from puerperal sepsis following abortions are relatively seven times as frequent as those from puerperal sepsis after childbirth. It is very evident that if this condition could be controlled our maternal deaths from puerperal septicemia would decrease greatly. Russia tried the experiment of legalizing abortion as a hospital procedure, and the results were remarkable. In Moscow, in 1926, 29,306 artificial abortions were performed in the hospitals without a single death. At Saratoff, 2,366 abortions were induced at the hospital without a death, while there were seven deaths from sepsis in 1,000 cases of secret abortion.

The question naturally arises, what relation these figures bear to our decreasing birth rate? You will recall that the birth rate of 17.4 for 1932 is the lowest rate ever recorded since the establishment of the registration area in 1915.

With the admission that there is something in the maternal situation which should be remedied, it is fair to ask where the responsibility lies. Probably the best answer is that given by Dr. Robert L. DeNormandie of Harvard Medical School, who said: "The public is to blame as well as the doctors because the public is all too willing to accept a woman's death in childbirth as the will of God. A great majority of these deaths are not the will of God. They are preventable."

First, let us consider the matter from the public's viewpoint. It is the duty of every pregnant woman to place herself under the care of a physician skilled in the art of obstetrics and to abide by his instructions with reference to her diet, habits and such other measures as he may deem necessary for a successful puerperium. The curricula of our medical schools must be rearranged so that students will receive more instructions in obstetrics and be given the opportunity to attend personally, or under the care of an obstetrician, a definite number of obstetrical cases. One of the country's leading obstetricians told me that as a result of a survey which he made he learned that in a number of schools students were permitted to graduate without attending a single obstetrical case. Their knowledge of the art was gained purely from observations in delivery rooms. In his own school each student is required to attend alone, or under competent supervision, 25 births before a certificate in obstetrics is issued.

The Commonwealth Fund of New York has just issued a report of the Committee on Public Health Relations of the Academy of Science, as a result of an exhaustive study of maternal mortality in New York City. In the opinion of this committee, 66 per cent of the deaths in maternity cases in New York during 1930, 1931 and 1932 could have been prevented by the application of proper medical knowledge. The records of over 340,000 births were examined, but

the committee concentrated its research upon 1,343 maternal deaths which it considers to have been preventable. The most surprising aspect of the report is that it holds medical attendants responsible for 61 per cent of the maternal deaths, either as a result of carelessness or indiscretion. Patients themselves are blamed for 37 per cent of the fatalities in this class. The death rate in the hospital cases was two and a half times as great as that for cases handled at home, though the committee admits that most of the abnormal cases are taken to hospitals. The following is a paragraph from the committee's report:

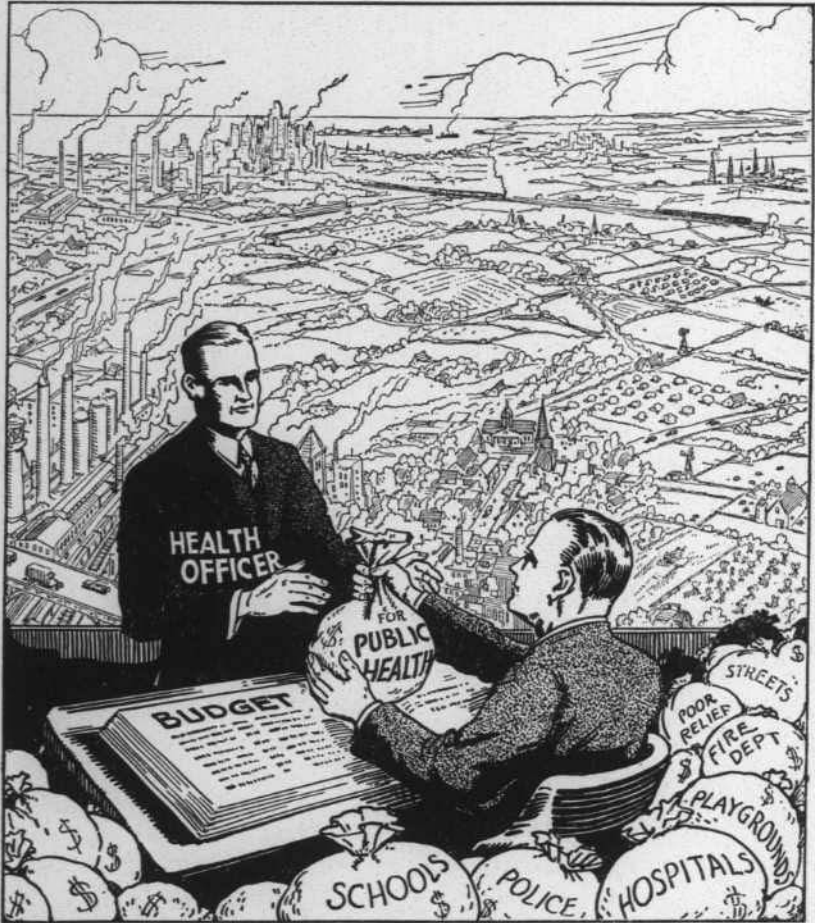
Sixty per cent of all the deaths which could have been avoided have been brought about by some incapacity of the attendant: lack of judgment, lack of skill, or careless inattention to the demands of the case. Some of these situations have arisen out of the fact that internes have been given too wide a field of independent activity. Most are plainly the result of incompetence.

The question naturally arises, to what extent are the conditions in New York paralleled elsewhere?

In the Journal of the American Medical Association for January, 1933, Drs. Joseph B. DeLee, of Chicago, and Heinz Siedentoph, of Leipzig, reported the results of a survey conducted by them in which the high maternal mortality in hospitals is compared with that in homes. Two sentences from their conclusions read as follows:

Hospitalization of maternity cases is increasing everywhere, but the puerperal mortality is not decreasing. Numerous authors call attention to the high institutional mortality compared with that of deliveries in the home. Meddlesome midwifery and puerperal infection seem to cause the greater part of the mortality, either single or in combination.

They concluded that something was wrong with the maternity wards of general hospitals and recommended that an architectural and administrative isolation should be made. It is very evident, therefore, that there is no single cause or group of individuals who are responsible for the conditions as they now exist. It is a divided responsibility, as stated by Dr. DeNormandie, and the coöperation of all must be secured before we can hope for any betterment.



PUBLIC HEALTH IS ESSENTIAL TO PROSPERITY

HUMAN LIFE IS THE STATE'S GREATEST ASSET



HEALTH NOTES

OFFICIAL MONTHLY BULLETIN

ESTABLISHED JULY, 1892

STATE BOARD OF HEALTH
JACKSONVILLE, FLORIDA

Entered as Second Class Matter, October 27, 1921

at the Postoffice at Jacksonville, Florida, Under the Act of August 24, 1912

This Bulletin will be sent to any address in the State free of charge.

Vol. 26

FEBRUARY, 1934

No. 2

Edited by

STEWART G. THOMPSON, D. P. H., Member
American Medical Editors' and Authors' Assn.

ARTICLES

SELF-RELIANCE—*Hanson*

RESPONSIBILITY—*Eaton*

AN OUNCE OF PREVENTION—*Brink*

AVAILABLE STATISTICS—*Thompson*

MALARIA AND ANTI-MALARIA DRAINAGE—*Griffitts*

HENRY HANSON, M. D., STATE HEALTH OFFICER

Also Executive Officer and Secretary of Board

BOARD MEMBERS

N. A. Baltzell, M. D., Pres.
MariannaHarry Dash Johnson, M. D.
Daytona BeachR. L. Hughes, M. D.
Bartow

STATE HEALTH OFFICER

Also Executive Officer and Secretary of Board

Henry Hanson, M. D.

BUREAUS AT JACKSONVILLE

DIRECTORS

Laboratories.....	Paul Eaton, M. D., D. P. H.
*Vital Statistics.....	Stewart G. Thompson, D. P. H.
Communicable Diseases.....	F. A. Brink, M. D.
Engineering.....	Louva G. Lenert
Public Health Nursing.....	Ruth E. Mettinger, R. N.
Accounting.....	G. Wilson Baltzell
Librarian.....	Elizabeth Bohnenberger
*Registration Inspector.....	Anna C. Emmons
Drug Store Inspector.....	M. H. Doss
Assistant Drug Store Inspector.....	Frank S. Castor

LABORATORIES

Jacksonville.....	Pearl Griffith, B. E.
Miami.....	E. R. Powell
Pensacola.....	Johnette McCormick
Tallahassee.....	Estelle Bryan
Tampa.....	H. D. Venters, B. S.

MEDICAL OFFICERS

Inverness.....	Leland H. Dame, M. D.
Jacksonville.....	W. A. Claxton, M. D.*
Jacksonville.....	T. E. Morgan, M. D.
Marianna.....	E. R. Marshburn, M. D.
Tallahassee.....	H. A. McClure, M. D.
Tampa.....	C. W. Pease, M. D.
West Palm Beach.....	C. W. McDonald, M. D.

*(And Tuberculosis Clinician)

DISTRICT SANITARY OFFICERS

Jacksonville.....	George W. Hulvey
Marianna.....	C. A. Holloway
Orlando.....	Russell Broughman
Tampa.....	Frank Pauley
West Palm Beach.....	S. D. Macready
On "C. W. A." Duty.....	Fred A. Safay
On "C. W. A." Duty.....	T. S. Kennedy, M. D.

PUBLIC HEALTH NURSES

Jacksonville.....	Joyce Ely, R. N. (Asst. Director)
Ft. Pierce.....	Annie Gabriel, R. N.
Jacksonville.....	Johanna L. Sogaard, R. N.
Marianna.....	Lalla Mary Goggans, R. N.
Tampa.....	Julia O. Graves, R. N.

MALARIA RESEARCH

Tallahassee.....	Mark F. Boyd, M. D. (Rockefeller Foundation)
------------------	---

MALARIA CONTROL STUDIES

Jacksonville.....	T. H. D. Griffiths, M. D. (U. S. Public Health Service)
-------------------	--

CONSULTANT IN ENTOMOLOGY

Orlando.....	W. V. King, Ph. D. (U. S. Bureau Entomology)
--------------	---

DIRECTORS FULL TIME COUNTY HEALTH UNITS

Tallahassee, Leon County.....	L. J. Graves, M. D.
Pensacola, Escambia County.....	W. A. McPhaul, M. D.

ADMINISTRATION

Henry Hanson, M.D., State Health Officer

SELF - RELIANCE

I want to recommend to you the reading of "Giants in the Earth," by Rolvaag, and "The Emigrants," by Ober. If a person can visualize what the early pioneers endured, maintaining an indomitable courage which never countenanced defeat, he or she should not feel so discouraged about present-day hard times. The times now are hard largely by comparison with the luxuries enjoyed by others. Naturally, there are many conditions which draw on the sympathy of the compassionate, and one wishes that some things were not so. However, "If wishes were horses then beggars might ride," the revised version of which probably should be "If wishes were comfortable automobiles, full of gas and oil, then hitch-hikers and others of the leisure class might go to the seashore or the mountains." It is not likely that we shall revert to the former near barbaric attitude of expecting people to till the soil, and think out the ways and means to earn a living by their own efforts.

In every county of Florida it is possible to make a living, fully as good and even better than what is depicted as being the lot during the early years of those concerned in the two books mentioned above. These early pioneers were not paid \$1.00 an hour for so-called skilled labor or 40 cents an hour as a minimum wage, nor did they have a radio and/or automobile. There are still opportunities for those who are satisfied to crawl before they walk and walk before they run. People can still be independent and self-reliant and grow into prosperous, dependable citizens of the state and nation.

If one looks into the history of the pioneers in Florida (the land of flowers) it will be found that they actually brought a living out of the soil or the natural resources of the State. It still can be done. The State Board of Health in cooperation with the United States Public Health Service is bending every effort to remove health hazards which might handicap the efforts of those who are old-fashioned enough to want to earn a living in the same old self-reliant manner.

TRANSPORTATION OF PARROTS

The attention of the State Board of Health was recently called to the fact that a circus operator had brought into the State certain birds that had been exposed to other birds affected with psittacosis. This matter was brought to the attention of the Surgeon General of the United States Public Health Service who has secured an amendment to the United States Interstate Quarantine Regulations, which reads

ADMINISTRATION

as follows:

Amendment No. 4 to the United States Interstate Quarantine Regulations, Public Health Service

Treasury Department,
Office of the Secretary
Washington, D. C.

December 20, 1933.

In accordance with the provisions of the Act of Congress approved February 15, 1893, the United States Interstate Quarantine Regulations are hereby amended to make Section 15½ read as follows:

Transportation of Parrots, Parrakeets and Other Birds of the Psittacine Family

15½. No person, firm or corporation shall offer for shipment in interstate traffic, and no common carrier shall accept for shipment or transport in interstate traffic, any parrot, parrakeet, love bird, macaw, cockatoo, lory, lorikeet, or any other bird of the parrot or psittacine family, unless an accompanying certificate has been obtained from the State health authority to the effect that to the best of the knowledge and belief of such authority such bird as may be offered for shipment has originated from an aviary, or other distributing establishment, free from psittacosis infection, as determined by inspection of birds and the environment in which they have been reared and housed, the history of such establishment as regards psittacosis infection, supplemented by such laboratory examination of birds, selected by a representative of the certifying authority, as may be deemed necessary to enable the certifying authority to determine that the birds offered for shipment are free from psittacosis infection; provided, that no bird of the species above mentioned that is under eight months of age shall be offered or accepted for shipment or transport in interstate traffic.

Certificates accompanying shipment of psittacine birds transported under provisions of this Section shall be surrendered by the common carrier to the health authorities at the destination of the shipment.

(Signed) H. Morgenthau, Jr.,
Acting Secretary of the Treasury.

This matter has been brought to the attention of City and District Health Officers for their guidance. It is published in Health Notes for the purpose of making the regulation more extensively known to all concerned.

LIBRARY

The following books have recently been added to our library:
Freeman—Study of Rural Public Health Service. N. Y. Commonwealth, 1933.
Cledenning—The Human Body. N. Y., Knopf, 1927.

ADMINISTRATION

- Menninger—The Human Mind. N. Y., Knopf, 1930.
Gruenberg—Parents, Children and Money. N. Y., Viking Press, 1933.
N. Y. Academy of Medicine—Maternal Mortality in New York City. N. Y. Commonwealth Fund, 1933.
Adler—Understanding Human Nature. N. Y., Garden City Co., 1927.
Martin—Joy of Living. N. Y., Doubleday, 1933.
Zinsser—Resistance to Infectious Diseases. N. Y., Macmillan, 1933.

BUREAU OF COMMUNICABLE DISEASES

F. A. Brink, M.D., Director

AN OUNCE OF PREVENTION

How much prevention is there in an ounce of prevention? How much cure is a pound of cure? These are questions that must be answered by one with the wisdom of a Solomon, but there is no doubt that, in matters of personal and public health, the superior value of preventive measures receives daily increasing recognition. No one can compare the known preventive measures—the safeguards to health—of a short half century back and those of the present day without being appalled at the hazards faced by the children of those earlier years; without wondering how anyone survived the perils of disease; without marveling at the strides made by medical science in disease prevention. Your family doctor would shudder at the thought of permitting practices formerly considered quite safe; practices that permitted infectious diseases to spread through entire families and communities in a manner that would now shock the nation. He would dislike very much to practice with conditions, remedies and diagnostic facilities as they were then.

Since much of our sanitary lore has come into being within fifty years, the average citizen and many school children today know more about sanitation and disease control than did the best physicians of the early '80's. Typhoid was wont to go through entire families; likewise, scarlet fever, diphtheria and other communicable diseases. It was rare indeed for a person to reach middle life without having one or several of the acute infectious diseases. Tuberculosis claimed whole families, one member after another and through one generation after another.

It is true that there is yet much to learn about the prevention of disease—much more education of the public regarding preventive measures already well known, much more interest to be aroused on the part of the public in applying the knowledge they already have. All this is evidenced by the fact that the preventable diseases are still entirely too prevalent. But men and women of science are de-

BUREAU OF COMMUNICABLE DISEASES

voting their lives to studies that result almost daily in discoveries of new and important facts which can be utilized in the cause of health. Other men and women are busy teaching and making practical application of the knowledge and principles of health.

What Are You Doing?

Your doctor, research worker, health official, sanitary officer and public health nurse cannot keep you well unless you do your part.

Did you take your child to your doctor for diphtheria inoculation before he passed his first birthday? Was your child vaccinated in his first year? Are you and your entire family protected from typhoid by inoculation? Have you a safe method of sewage disposal? Is your drinking water safe? Is your milk supply safe? Is your home mosquito-proof? Does the family's diet meet the minimum required for maintenance of health? Is the home properly ventilated, heated and lighted? Do you practice and teach the common principles of personal health—cleanliness, regular habits of rest, exercise, elimination, and care of the teeth? Do you go to your doctor and dentist periodically for examination, advice and such other service as you may need? If you do, you are to be commended. You and yours will stand a much better chance to enjoy good health than you would otherwise.

If you do not, you may remain well but you are likely to become ill or have serious illness in your family and you will then ask yourself whether you might not have avoided much trouble by using the proverbial ounce of prevention. You should begin at once to surround yourself and family with every possible safeguard. Do not wait for someone else to do it. That someone else is very busy and it will take a long, long time to get around to you. **Do Your Part.**

TUBERCULOSIS SANATORIUM

Yes, we have no tuberculosis sanatorium. Do you like to admit it? We do not. Interest and enthusiasm for a sanatorium are on the increase. Several counties are borrowing from Uncle Sam to build their own. Agitation for a state institution is growing and the outlook seems bright. A sanatorium would be an important means for promoting public health—for reducing the number of cases and deaths from tuberculosis. If you want a tuberculosis sanatorium get to talking about it. You know of neighbors who are ill or have died of tuberculosis. You have seen families impoverished and wiped out by it. You know it causes 1000 deaths a year in Florida. Tell your senator, county commissioner, mayor, club members, your preacher, **anybody**. Keep agitating, everybody, altogether; then we will get somewhere.

MALARIA CONTROL STUDIES

T. H. D. Griffiths, M.D., Director

MALARIA AND ANTI-MALARIA DRAINAGE

What Is Malaria ?

1. Malaria, also known as "chills and fever," bilious fever, swamp fever, etc., is a disease of man occurring in hot and warm countries. The symptoms of this disease are due to the development of small animal parasites which feed on the infected person's blood, turn loose toxin, or "poison," in the blood, and rapidly destroy the red blood cells.

How You Get It

2. There are only two ways by which malaria may be introduced into a person's blood: (a) by injecting blood from a malaria patient into a person's system, and (b) by the bite of a certain kind of mosquito which has previously (about 12 days before) bitten a person who had malaria parasites in his or her blood. In other words, the "malaria mosquito" (*Anopheles*) gets her malaria from a "malaria man" and about 12 days later gives malaria to persons whom she bites. In nature man gets malaria in no other way.

How Prevented

3. To prevent malaria it is only necessary to keep *Anopheles* (malaria mosquitoes) away from man. This may be done by preventing mosquitoes from developing, or by thoroughly screening houses, and the people staying behind screens from dusk to sunrise. (Malaria mosquitoes are active at night).

Kinds of Mosquitoes

4. In the entire world there are more than 500 different kinds, or species, of mosquitoes, and less than a hundred different kinds of *Anopheles*, or malaria mosquitoes. In the Western Hemisphere there are about 50 species of *Anopheles*, but in the Southeastern United States there is only one *Anopheles* largely responsible for malaria. This is *Anopheles quadrimaculatus*, the mosquito with four small dark spots on the wings. *Anopheles* that we have are:

Anopheles quadrimaculatus
Anopheles crucians
Anopheles punctipennis
Anopheles atropos
Anopheles walkeri
Anopheles barberi

Where *Anopheles* Are Raised

5. Our principal malaria mosquito—*Anopheles quadrimaculatus*—like all other mosquitoes, develops in water. The favorite places

MALARIA CONTROL STUDIES

are **fresh water** (not salty) ponds, lakes, ponded swamps, and the like. Of no practical importance in malaria control are artificial containers like water barrels, tin cans, house gutters and such. The *Anopheles* lay their eggs—hundreds at a time—on the surface of the water in ponds and pools, which is covered with vegetation or collections of “flotage” (leaves, small sticks, broken up weeds, grass stems and the like). The *Anopheles* eggs hatch into larvae (wiggle-tails) on the water surface, and the larvae wiggle about and feed in the vegetation and flotage (trash) for about 7 to 10 days, when they change to **pupae**, or “tumbler.” They remain as pupae about 2 days, just tumbling about (pupae do not eat), and then the back of the pupa splits and the full grown mosquito crawls out. After about one day, when the wings are dry, the mosquito’s body is hardened and she becomes hungry, the female mosquito flies away in search of her best food—**blood** of a warm-blooded animal. She has no malaria as she comes from the water. She gets malaria only by biting and getting blood from a person who has malaria. (You will note that the mosquito is referred to as “she.” Only the female mosquito bites; the males get their food from plant and fruit juices.)

Summary

1. Malaria is a disease resulting from the development and action of malaria parasites in the blood of man.
2. Malaria parasites are injected into man by a mosquito which has malaria that it got from a person who had malaria infection.
3. Malaria is prevented by keeping malaria mosquitoes from biting man.
4. There are over 500 different kinds of mosquitoes, but less than a hundred kinds of *Anopheles* (“malaria mosquitoes”). We have six species of *Anopheles* in the Southeastern part of the United States, but *Anopheles quadrimaculatus* is the **important** carrier of malaria.
5. *Anopheles quadrimaculatus* is essentially a pond breeder. The female bites (the male does not), gets malaria herself and carries the disease to persons she bites after about 12 days from the time she (the *Anopheles*) first got her “meal” of malaria blood.

Drainage to Eliminate *Anopheles* Production

1. Drainage to eliminate, or get rid of, water in which *Anopheles* mosquitoes (malaria-carrying mosquitoes) produce may not necessarily be good agricultural drainage, and good agricultural drainage may, under some circumstances, create, or make worse, mosquito conditions. As an example of the latter, wide drainage ditches, or canals, may be so constructed with flat grade, wide bottoms and improper curves or angles, so that at low-water stage there remains in the canals or ditches a series of quiet pools in which vegetation grows and flotage (finely divided sticks, twigs, grass stems, leaves and the like) floats and forms ideal resting and feeding places for *Anopheles*

MALARIA CONTROL STUDIES

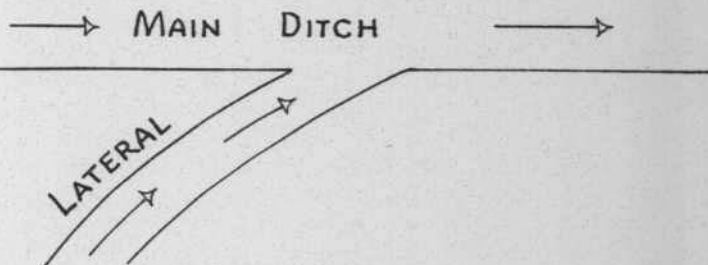
larvae (wiggle-tails). Such places so created by bad drainage (although, perhaps, good drainage agriculturally) may have drained a wooded swamp of shallow, foul water, which in its original condition produced few or no *Anopheles* mosquitoes. By the improper construction of the canals and ditches ideal pools of water of varying depth, width and length are created for mosquito production. In anti-malaria (anti-*Anopheles*) drainage, two purposes are kept in mind—removal of pools and ponds from the surface of the ground and the avoidance of quiet or still water in the drains.

Cleaning Ponds and Re-Channeling Streams

2. As malaria-carrying mosquitoes produce mainly in quiet waters, such as lakes, ponds, pools and sluggish streams, these are the important places to be drained, cleaned, re-channeled or trained. If, on account of high cost, or otherwise, lakes and ponds can't be drained, cleaning of vegetation and flottage, or the application of larvicides will be necessary, provided these places produce mosquitoes of malaria importance. Sluggish streams should be straightened, banks made smoother, obstructions removed and bottom grade corrected, in order to establish a current in the stream. A fair current at low-water stage will prevent the production of *Anopheles quadrimaculatus*.

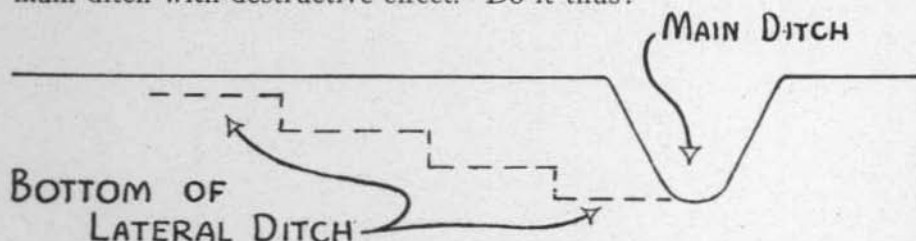
Open Ditches

3. Having determined upon the drainage of an area, a line of levels should be run, right-of-way cleared, grade stakes set and a line should be stretched along the course for the laborers to follow. In all instances ditches should be as straight as possible from the outlet to the upper end of the system. "A drainage system is no better than its outlet." Main ditches, or canals, should be installed first and allow sufficient time to elapse before constructing the lateral ditches. In this way, usually, fewer lateral ditches will be indicated than before the main ditch has time to drain such water areas as it will. If the ditch is constructed in dry season, it may be advisable to wait for a rainy season to indicate location of additional lateral drains. Care should always be taken to have lateral, or branch, ditches enter the main ditch headed down stream at an acute angle or gentle curve, so that the flow will take place with that of the main channel and not across it.

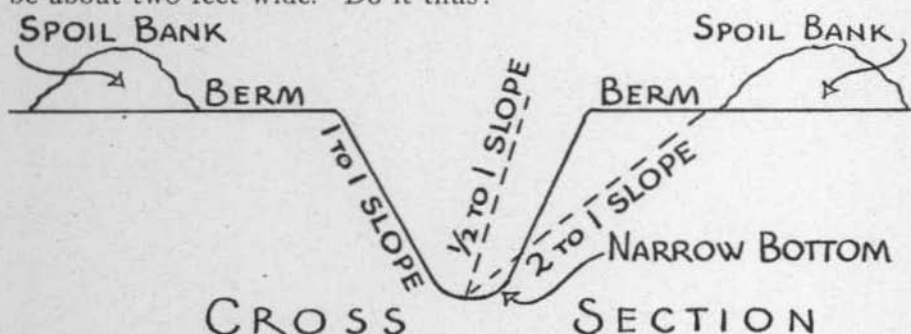


MALARIA CONTROL STUDIES

When the flow line in the main ditch is a great deal lower than the entering lateral ditch it may be advisable to step down the last 10 feet or more of the lateral ditch so as to prevent spilling into the main ditch with destructive effect. Do it thus:



Slopes of ditch banks will be cut according to soil formation. In the average soil a slope of 45° , or 1 to 1 slope, will be correct. In sandy or gravelly formation a $1\frac{1}{2}$ to 1, or even 2 to 1 slope may be required. In clay a $\frac{1}{2}$ to 1 slope, or even a nearly vertical bank will stand. On hillsides the upper side of the ditch should be made flatter than the lower. In all ditch construction the weight of the spoil banks should be away from the edge of the ditch. In other words a "Berm" should be left between the edge of the ditch bank and the spoil banks. Openings should be made at intervals through spoil banks to prevent impounding water behind them. In such locations where it can be done, the dirt removed from the ditch should be spread out evenly away from the ditch, or used to fill pools or low areas nearby. When this is not practical, on account of expense or otherwise, spoil banks will be made as described herein. Ordinarily the berm should be about two feet wide. Do it thus:



In placing culverts under roads, it is a rather common practice of engineers to set culverts at greater elevation than the bottom of the ditch. This is done so the culvert will better flush out at storm water stage. This practice too often results in the impounding (ponding) of water in the ditch at the upper end of the culvert and such pool may become an ideal producing area for *Anopheles* mosquitoes. Generally, the grade should be increased for the length of the culvert, but the mouth of the culvert should be set low enough to empty the ditch at low-water stage.

MALARIA CONTROL STUDIES

Summary

1. Efficient "malaria drainage" may differ from "agricultural drainage." The former requires that pools or ponds be removed from the ground surface and that canals and ditches be either emptied at low water stage or that current be maintained at all stages of the water; the latter (agricultural drainage) may require, in addition, a decided lowering of the water table (ground-water level).

2. Open ditches should be carefully located, cut to proper grade, sides sloped from 2 to 1 (in sand or gravel) to $\frac{1}{2}$ to 1, or less (in stiff clay), bottoms narrowed, laterals entering at an acute angle, or curve, headed down stream; spoil banks located back from the edge of ditch and a berm of about two feet provided between the edge of bank and the spoil bank; culverts should have increased grade and be set low enough to empty the ditch at low-water stage.

The foregoing covers, in brief, the requirements in hand-ditching; machine and dynamite ditching require additional procedure.

BUREAU OF LABORATORIES

Paul Eaton, M.D., D.P.H., Director

RESPONSIBILITY

The occupation of the locomotive engineer is a dramatic one. When his train is speeding over the track he is responsible for the lives of scores of people. On the correctness of his judgment and the steadiness of his nerves depends the safety of his passengers. The misinterpretation of a signal or a momentary lapse of care may cost many lives.

The occupation of the surgeon is a dramatic one. During an operation he is responsible for the life of his patient. An error in judgment or a momentary lapse of care may cost a life or may result in a life-long crippling.

These things are matters of common knowledge. Stories have been written around the theme of responsibility. Sermons have been preached about it. Lectures have been delivered about it by the score and hundred.

But how about the machinist who made the locomotive? Did he not have a responsibility? How about the nurse who put up and sterilized the dressings for the surgeon's patient? How about the druggist who weighs out deadly poisons every day? Have they no responsibility?

Every person has some responsibility. The cook in a restaurant has a great responsibility. It may not be as dramatic as that of the engineer, nor of the surgeon, but it is real.

BUREAU OF LABORATORIES

The technicians in the Laboratories of the State Board of Health have on them a great responsibility. Human lives daily depend on their judgment and faithfulness. There is nothing dramatic about their work, at least so far as the public is concerned. But it may be terribly dramatic to those who know what it means.

A tubercle bacillus is so small that even after it has been magnified one thousand times it resembles a very short piece of very fine silk thread (appropriately colored). Yet on its discovery may hang a life.

I am impelled to write these lines because the making up of the annual report discloses the fact that each laboratory worker in the system was called on to do, during the year 1933, from three to five times as much work as should have been required.

SUMMARY OF WORK DONE IN THE LABORATORIES OF
THE STATE BOARD OF HEALTH DURING THE
MONTH OF DECEMBER, 1933

	Jacksonville	Tampa	Pensacola	Miami	Tallahassee	Total
Animal Parasites	1993	2551	195	83	132	4954
Diphtheria	1425	805	54		25	2880
Typhoid	630	182	13	42	24	891
Malaria	623	241	20	32	92	1008
Rabies	7	1				8
Tuberculosis	266	108	31	61	16	482
Gonorrhea	568	236	35	161	53	1053
Kahn	4057	2220	238	2143	177	8835
Water		39	38	176	9	262
Milk	242	287	132	618	60	1339
Miscellaneous	214	16	7	147	8	392
	10025	6686	763	4034	596	22104

Specimen containers distributed.....15155

BIOLOGICAL PRODUCTS DISTRIBUTED

Diphtheria Antitoxin	10,000 units	98 Packages
	5,000 units	29 Packages
Schick		3800 Tests
Toxoid		1675 C. C.
Toxin Antitoxin		1443 C. C.
Typhoid Vaccine		1328 Treatments
Vaccine Virus		1262 Capillaries
Antirabic Virus		32 Treatments
Tetanus Antitoxin	1,500 units	6 Packages

BUREAU OF VITAL STATISTICS**Stewart G. Thompson, D.P.H., Director****AVAILABLE STATISTICS**

The annual report of the State Board of Health is now in the making and the State Health Officer expects to have what will be known as the Thirty-fourth Annual Report ready for distribution at an early date. This annual report for the calendar year 1933 will contain information concerning activities during the past year. Because of the volume of work required to round up all delayed birth and death certificates and the tedious routine in connection with tabulations for vital statistics, it is not possible to include in an early annual report general tabulations desired. The customary policy for vital statistics has, therefore, been followed in compiling this annual report, i. e., giving complete tabulations for the calendar year 1932 with a general report of the activities of the Bureau during the year 1933. Copies of annual reports of the State Board of Health will be mailed to any individual in the State of Florida upon request as long as the supply on hand will permit.

Monthly Spot Maps

Every month, mimeographed releases are given out to those requesting them as well as to a regular mailing list of city and county health officers, Governor's Safety Councils, officials of health organizations and sanitariums. These releases are limited to the more important preventable causes such as typhoid fever, diphtheria, malaria, automobile accidents, etc. The releases to which we have just referred have been a very important factor in the control or prevention of deaths from preventable causes. Contained in each release is the number of deaths for each calendar month as compared with that of the previous year; an outline map of the State of Florida is also shown with an indication as to the geographical location of each death under the cause listed. The number of deaths is also shown for certain age groups; the estimated population of each county and the number of deaths occurring in the county. Health officers using these monthly releases are, therefore, kept informed monthly concerning the number of deaths and their geographical location in the state which has proven of considerable value in the discovery of epidemics and has led to their immediate control. All officials interested in the control of deaths from preventable causes are urged to secure these monthly releases regularly and put into effect the necessary action to immediately eliminate the cause or causes responsible for the unnecessary toll of human life.

BUREAU OF VITAL STATISTICS

Population

Recently, the mid-year estimates of population were published in a Florida newspaper and the number of requests for this class of information was quite surprising. The number of deaths in a particular city, county or community is not always sufficient in measuring hazards. For comparison, it is necessary to use rates and in order to arrive at a proper rate, it is necessary to have an up-to-date population. The State Board of Health has on file the mid-year estimated populations for all cities and counties and these population figures have been carefully checked by the Geographer of the United States Bureau of the Census so that the results given out from this Bureau are authentic in that the same totals are used by the State Board of Health as will later be used in the mortality releases of the United States Bureau of the Census. Since the Federal Census is taken only once in ten years, it is necessary to have carefully prepared estimates for the intervening years which are, of course, based on the Federal Census of each decade. Any one desiring figures on estimated populations of cities and counties in Florida may receive the information by request.

Annual Tabulations

Annual tabulations of births, deaths, diseases, marriages and divorces may be found in the annual reports. If the supply of annual reports for any particular year is exhausted, special figures will be prepared and released when the occasion arises if a communication is directed to the State Board of Health. If comparative figures are needed for states and cities outside of Florida, the information may be found in the annual reports released by the United States Bureau of the Census at Washington. If, at any time, only a few figures are desired, the information may be secured through the State Board of Health in Jacksonville upon request.

Service

Approximately 100,000 original records are filed in the Bureau of Vital Statistics annually. These records are carefully checked, bound in volumes and reference made available through a continuous card indexing system. The primary object of the Act providing for the securing of records of the inhabitants of Florida was to make legal information available. The second, but also important, use of the records is contained in the compiled tabulations for statistical analysis and the establishing of a measuring unit by which to gauge progress in the control of deaths from preventable causes. The information in the permanent files of the State Board of Health is for the use of the citizens of the State and the readers of this publication are urged to use the information and avail themselves of the service that is at their command constantly.



The HEALTH OFFICER Says-

I wish to call parents' attention to some of their privileges which are too often forgotten or misunderstood.

Whatever may be said about the merits of the old-fashioned educational methods and the excellence of the instruction in "the three R-s" a generation ago, *today's children are learning much more about how to live.* Not only is definite information given about the elements of public health and personal hygiene, but actual attention is paid to every child's health. This is not all philanthropy or new-fangled education. A sick or defective child is a liability to a school since he requires more supervision and therefore costs more money.

Supervised Play

Gymnasiums and playgrounds were not built to advertise or beautify our town. They may do that, but their main object is to afford our boys and girls an opportunity to develop their physical stamina and their appreciation of fair play. Doing this in safety and under proper guidance is not an educational frill but part of a sane program of getting youth ready for life.

Parents should not fail to get the full benefit of what is done at school for

their children's health. When you get a report of a physical examination — perhaps calling your attention to certain imperfections that need repair—thank your luck, or good judgment, for living in a community that is up-to-date and rendering you a real service. Then, for the sake of your child, *have the corrections made at the earliest possible moment.*

Sickness Prevention

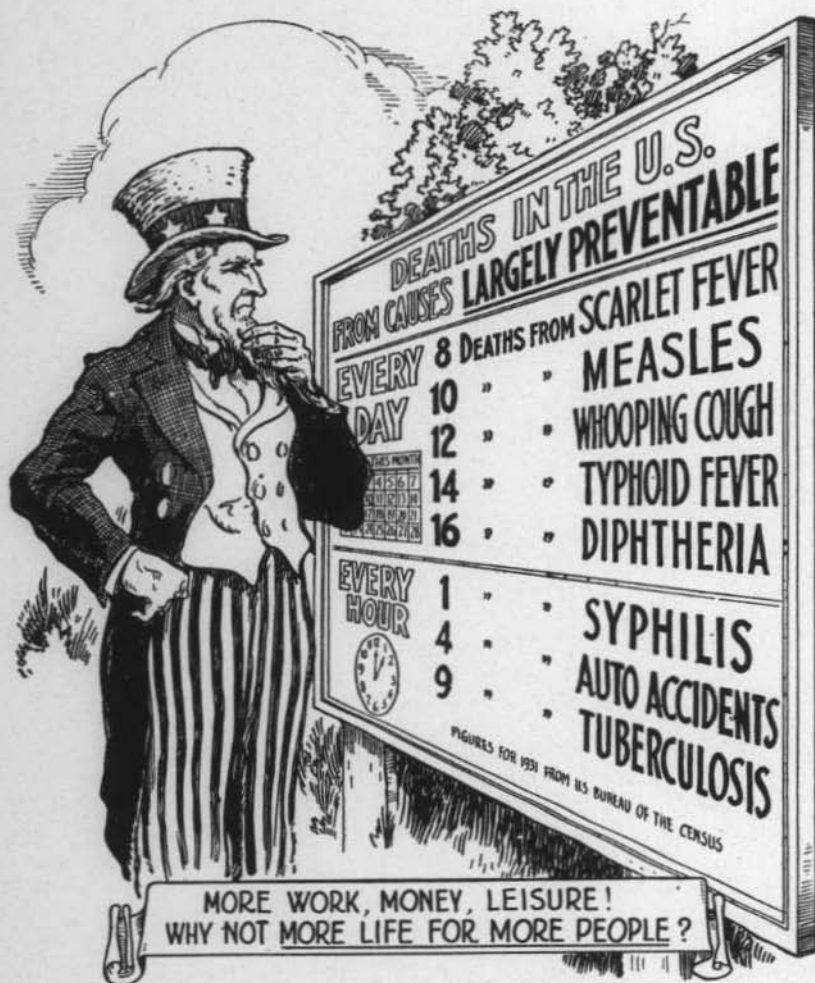
All children should be vaccinated and protected against diphtheria long before they go to school. If this has been overlooked in your family, be sure that it is attended to either by your own physician or at a school clinic.

If Johnnie or Mary appears at home at an odd hour some day bearing a note to the effect that certain suspicious symptoms have been observed, consider the event as another sign of thoughtful intelligence in your school. Watchful teachers and nurses aim to get sick children home

in order that they may have prompt treatment and so that others may be protected from contagious disease.

Only by parents' entire understanding of and co-operation with the schools and the health department can we give full value to our community.





HUMAN LIFE IS THE STATE'S GREATEST ASSET

FLORIDA



HEALTH NOTES

OFFICIAL MONTHLY BULLETIN

ESTABLISHED JULY, 1892

STATE BOARD OF HEALTH
JACKSONVILLE, FLORIDA

Entered as Second Class Matter, October 27, 1921

at the Postoffice at Jacksonville, Florida, Under the Act of August 24, 1912

This Bulletin will be sent to any address in the State free of charge.

Vol. 26

MARCH, 1934

No. 3

Edited by

STEWART G. THOMPSON, D. P. H., Member
American Medical Editors' and Authors' Assn.

ARTICLES

THE CWS—SNS—1—*Hanson*

LOGICAL THINKING—*Eaton*

DIPHTHERIA ISOLATION—*Brink*

SUPERVISION OF MIDWIVES—*Purdy*

HEALTH DEPARTMENT—PHYSICIANS—*McEachern*

HENRY HANSON, M. D., STATE HEALTH OFFICER

Also Executive Officer and Secretary of Board

BOARD MEMBERSN. A. Baltzell, M. D., Pres.
MariannaHarry Dash Johnson, M. D.
Daytona BeachR. L. Hughes, M. D.
Bartow**STATE HEALTH OFFICER**

Also Executive Officer and Secretary of Board

Henry Hanson, M. D.

BUREAUS AT JACKSONVILLE**DIRECTORS**

Laboratories.....	Paul Eaton, M. D., D. P. H.
*Vital Statistics.....	Stewart G. Thompson, D. P. H.
Communicable Diseases.....	F. A. Brink, M. D.
Engineering.....	Louva G. Lenert
Public Health Nursing.....	Ruth E. Mettinger, R. N.
Accounting.....	G. Wilson Baltzell
Librarian.....	Elizabeth Bohnenberger
*Registration Inspector.....	Anna C. Emmons
Drug Store Inspector.....	M. H. Doss
Assistant Drug Store Inspector.....	Frank S. Castor

LABORATORIES

Jacksonville.....	Pearl Griffith, B. E.
Miami.....	E. R. Powell
Pensacola.....	Johnette McCormick
Tallahassee.....	Estelle Bryan
Tampa.....	H. D. Venters, B. S.

MEDICAL OFFICERS

Inverness.....	Leland H. Dame, M. D.
Jacksonville.....	W. A. Claxton, M. D.*
Jacksonville.....	T. E. Morgan, M. D.
Marianna.....	E. R. Marshburn, M. D.
Tallahassee.....	H. A. McClure, M. D.
Tampa.....	C. W. Pease, M. D.
West Palm Beach.....	C. W. McDonald, M. D.

*(And Tuberculosis Clinician)

DISTRICT SANITARY OFFICERS

Jacksonville.....	George W. Hulvey
Marianna.....	C. A. Holloway
Orlando.....	Russell Broughman
Tampa.....	Frank Pauley
West Palm Beach.....	S. D. Macready
On "C. W. A." Duty.....	Fred A. Safay
On "C. W. A." Duty.....	T. S. Kennedy, M. D.

PUBLIC HEALTH NURSES

Jacksonville.....	Joyce Ely, R. N. (Asst. Director)
Ft. Pierce.....	Annie Gabriel, R. N.
Jacksonville.....	Johanna L. Sogaard, R. N.
Marianna.....	Lalla Mary Goggans, R. N.
Tampa.....	Julia O. Graves, R. N.

MALARIA RESEARCH

Tallahassee.....	Mark F. Boyd, M. D. (Rockefeller Foundation)
------------------	---

MALARIA CONTROL STUDIES

Jacksonville.....	T. H. D. Griffiths, M. D. (U. S. Public Health Service)
-------------------	--

CONSULTANT IN ENTOMOLOGY

Orlando.....	W. V. King, Ph. D. (U. S. Bureau Entomology)
--------------	---

DIRECTORS FULL TIME COUNTY HEALTH UNITS

Tallahassee, Leon County.....	L. J. Graves, M. D.
Pensacola, Escambia County.....	W. A. McPhaul, M. D.

ADMINISTRATION**Henry Hanson, M.D., State Health Officer****THE CWS—SNS—1**

During the Annual Meeting of the State Nurses Association, the State Director of the Federal Emergency Relief asked the Association to appoint a committee to draw up plans to cover nursing activities of the relief program. The Director of the Federal Emergency Relief was meeting one problem after another in such rapid succession that it was difficult to keep pace with them, to say nothing of working out the best solution to each as it came along.

How should the relief nursing be handled? Who should do the nursing and what scale of pay should the nurses receive? What organization should direct the nursing? These were some of the many questions asked. The special committee of the State Association appointed to make recommendations, after due deliberation, concluded that the State Board of Health was the proper official body to handle the state nursing program and so recommended to the State Director of the Federal Emergency Relief.

Shortly after this recommendation the authorities in Washington announced a new plan, setting up a new Civil Works Administration which changed things a great deal. Under the new plan, most of the unemployed were given work at a rate of pay which it was assumed would enable them to pay for medical care and other necessities (there have been rumors that some bought automobiles). Inasmuch as all could not be given employment at a high rate of pay there remained a continuing need for medical and nursing aid; also, a very large number of nurses must either be given work or placed on the relief rolls. In order to solve the difficulty, the Social Service Director boldly conceived the idea of doing two things in one stroke by putting through a project to supply both public health and bedside, as well as other forms of nursing, and placed it all under the direction of the State Board of Health. (Miss Ruth E. Mettinger, who has been appointed Director of the Division of Public Health Nursing of the State Board of Health, will continue the discussion of the CWS nursing in the next issue of Health Notes.) The plan of the program is as follows:

CWSA Nursing Project**1. Infant, Pre-school and School:**

The nurses employed for CWS nursing will be instructed by the State Board of Health in a uniform method of procedure that has proven to be practical and to comply with the basic principles of public health.

A. Physical inspection of children in families receiving relief or in need, though not on relief, to screen out children in obvious need of medical examination. These inspections may be done in the schools

ADMINISTRATION

or in the homes in order to reach all children in the families. If time allows, all children will be included as in a general school health program.

B. Arrange for and assist with the medical examinations of selected children by local physicians participating in the program.

C. Arrange for correction of defects as ordered by physicians or dentists.

D. Follow-up of children needing further instruction on nutrition or other specific health problems.

E. One of the purposes of the CWS nursing service is to determine the general health status of children of families who are on relief and of the families in need though not on relief; to determine abnormal conditions of nutrition, physical defects, and other specific health problems, and to arrange through the proper channel for the correction of abnormal health conditions.

F. Nurses will coöperate with all existing agencies and will, while making home visits, gather whatever social records the County Administrator deems advisable.

G. The nurse will coöperate with home economic groups, Parent-Teacher Associations, and other agencies in planning lunches for mal-nourished children and making these lunches available.

H. Several visits may be necessary to make clear to the families the procedure necessary in carrying out the doctor's instructions. Special attention will be given to mal-nourished children and to infant feeding. The nurses will teach methods of preparing infant feedings as outlined by the family physician. Wherever possible mothers' classes and demonstrations in child care will be conducted.

2. Maternity:

A. The nurses will ascertain whether arrangements have been made for prenatal care and delivery. They will explain the importance of postpartum examination and care. Where a home delivery is planned it will be the duty of the nurse to see that as far as possible the mother provides a sterile obstetrical package in order that the physician or midwife may do their best work.

B. Prenatal literature will be furnished by the State Board of Health.

C. Midwife investigations could also be carried out in certain counties.

3. Communicable Diseases:

A. The extent of the CWS nurse's activities on communicable disease control will be guided by the state and local health regula-

ADMINISTRATION

tions and these must be carried out in coöperation with medical societies.

B. In communities where there is a demand for group work, e. g., vaccinations and immunizations, the details should be worked out in coöperation with the County Medical Society.

4. Visiting Nurse:

The routine for visiting nurse service will be based on the standards prepared by the National Organization for Public Health Nursing and the N. O. P. H. N. Manual will be used as a guide.

Types of Service: Nurses may be assigned to duty in public hospitals and institutions such as hospitals for mentally ill, deaf, blind, children's homes, homes for correction including prisons, and county homes for indigent; laboratory, X-ray; general nursing and clinics; as assistants to state, county and city health departments; to preventoria and day nurseries.

Details of the program will be worked out with each CWS nurse by the district supervisors, who in turn will be guided by the Manual for Public Health Nursing, State Health Laws and Regulations, and National, State and local relief regulations. The bedside nursing service will be under the direction of the county medical societies. In certain counties women who have registered as practical nurses, but have no specific training in nursing and are not graduates of reputable hospitals, may be used to work with and assist qualified registered nurses in caring for chronic and aged patients. These women should be classed as nurses' aides and not as practical nurses.

BUREAU OF LABORATORIES

Paul Eaton, M.D., D.P.H., Director

LOGICAL THINKING

It is recorded in the history of photography that the power of the vapor of mercury to fix the photographic (light drawn) image on an iodized silver plate was discovered by accident. The images were well known but they were fleeting; they behaved as did the photographers "proofs" which the older generation of us will recall very vividly.

But one experimenter noticed that certain of his pictures did not fade. Upon investigation it was found that the permanent ones were those that had been stored in a certain cupboard in the laboratory. Further tests showed that this experiment could be verified at will. The question then arose, what was there in this particular cupboard that differentiated it from other cupboards. This question was easily

BUREAU OF LABORATORIES

and definitely solved by removing from the cupboard one by one the various articles stored in it and observing the fate of exposed plates stored in it as before.

Fortunately, the number of different articles stored in the cupboard was not large. One of them was a jug of metallic mercury or quicksilver. It was noted that after the mercury was removed, storage of exposed plates in the cupboard did NOT make them permanent.

In general, the surest way to find a needle in a haystack is to take out each straw separately. Much scientific work is of this nature and the negative results obtained by many good workers are not to be despised. After all the straws have been taken out, it is not so difficult to find and recognize the needle.

The question of a possible immunization against tetanus is a case in point. The brilliant success which has been attained in the struggle against diphtheria leads us to hope that a similar protection against tetanus might be obtained by somewhat similar means. Several workers have been directing their attention to this problem.

Some three years ago, a French investigator published some favorable results. Doubtless many others are working on the problem now. When all the straws have been taken out of the haystack, the needle will not be hard to find. Perhaps somebody will happen on the needle before all the straws have been examined.

SUMMARY OF WORK DONE IN THE LABORATORIES OF
THE STATE BOARD OF HEALTH DURING THE
MONTH OF JANUARY, 1934

	Jacksonville	Tampa	Pensacola	Miami	Tallahassee	Total
Animal Parasites	3088	1661	499	177	242	5667
Diphtheria	867	661	37	799	26	2390
Typhoid	683	220	20	54	29	1006
Malaria	1224	213	20	29	138	1624
Rabies	18	4				22
Tuberculosis	258	119	19	64	19	479
Gonorrhea	741	256	51	185	74	1307
Kahn	5251	2852	267	3418	297	12085
Water		78	5	228	9	320
Milk	274	433	9	613	115	1444
Miscellaneous	281	18	3	191	12	505
	12685	6515	930	5758	961	26849

Specimen containers distributed.....14408

BUREAU OF LABORATORIES

BIOLOGICAL PRODUCTS DISTRIBUTED

Diphtheria Antitoxin	10,000 units	130 Packages
	5,000 units	41 Packages
Schick		5680 Tests
Toxoid		3030 C. C.
Toxin Antitoxin		759 C. C.
Typhoid Vaccine		3840 Treatments
Vaccine Virus		2711 Capillaries
Antirabic Virus		21 Treatments
Tetanus Antitoxin	1,500 units	6 Packages

ALL REQUESTS FOR BIOLOGICAL PRODUCTS SHOULD
BE DIRECTED TO THE STATE LABORATORY
STATE BOARD OF HEALTH
JACKSONVILLE, FLORIDA

BUREAU OF COMMUNICABLE DISEASES

F. A. Brink, M.D., Director

DIPHTHERIA ISOLATION

To prevent the spread of diphtheria infection from a patient it is not enough just to keep the patient in isolation for a fixed period of time but nose and throat specimens should be taken by the attending physician, health officer or a competent nurse and submitted to the State Board of Health Laboratory for examination. The isolation period should not be terminated until, on two consecutive examinations of specimens taken on different days, the laboratory reports "no diphtheria germs found." All the members of the household should have at least one test and be proven free of diphtheria germs before being released. It is possible in many cases to recognize the presence of diphtheria germs on direct microscopic examination of material from the patient but for the purpose of releasing from isolation or detecting carriers, the material is always "planted" on a culture medium well suited to the growth of the diphtheria organism. This makes their discovery much more certain. Release cultures are to be examined in a State Board of Health Laboratory or a laboratory approved by the State Board of Health.

It is permissible to transfer well children from a home in which there is a case of diphtheria to another (that of a relative or friend) in which there are no children. They are to be kept there under restrictions until tested and if found free of diphtheria germs they may then be permitted to go about but must not enter their own home until the patient has recovered and been discharged.

If the patient is removed to a hospital or isolated in the home and cared for entirely by a registered nurse, the other members of the

BUREAU OF COMMUNICABLE DISEASES

family may be permitted to go about freely after they are proven free of the specific germs of diphtheria.

The breadwinner, if he is free of the germs, has no contact with the patient, is not a food handler and if his work does not involve contact with children, may go about his usual work.

In spite of every precaution, carriers are certain to be abroad in the land and children who are not immunized very early in life are in constant danger. The family physician should be consulted about the single treatment with alum precipitated toxoid for diphtheria prevention.

The lives of many children would be saved if a doctor were called to attend every child with a sore throat or "croup." Many such children do recover without special medical attendance but the early recognition and treatment of diphtheria is **exceedingly important**.

The very life of the patient often depends on prompt administration of antitoxin. Delay, even for a few days, often proves fatal and so it is most important to call the doctor early, even at the risk of calling him several times for something less serious. His services are worth having and he can do much good for patients with ordinary sore throat, tonsilitis or a common cold.

Most physicians serve well the community in which they practice by isolating the communicable disease patients they are called to treat and giving specific instructions as to disinfection, excluding visitors, screening against insects, etc. The unselfish services of these health-minded doctors are not always appreciated and it is little wonder that some of them lose interest in thus serving gratis in the capacity of a health officer.

Every city and county should have a health officer, compensated for his services from public funds. He should be reasonably secure in his position and removable only for incompetence or neglect. He should be definitely held responsible for the faithful discharge of the duties placed upon him and required to familiarize himself with the duties of his position and the correct procedure to follow in handling the usual problems of public health. The coöperation of such a local official would extend and enhance the value of the services of the State Board of Health to any community.

TYPHOID CARRIERS

In every case of typhoid fever, the infection has come from some person who harbors typhoid organisms, usually in the intestine. All typhoid patients, early in the attack, discharge typhoid germs with the intestinal contents. Some persons who have had typhoid and recovered continue thus to discharge virulent germs for months or years. Such persons are known as carriers. Some carriers have no knowledge of having typhoid.

BUREAU OF COMMUNICABLE DISEASES

We believe that in the majority of cases the infection has come from carriers and that relatively few are infected from people who are sick with the disease.

In the above facts, there is abundant reason for great care in the disposal of human excreta; for the belief that sanitation has played a large part in decreasing steadily the number of typhoid cases and deaths. Without careful laboratory tests, no one can be certain that he is not a carrier; hence everyone should take great pains to dispose of his discharges in a sanitary manner and to wash the hands thoroughly after going to the toilet. It is most important that food handlers and dairy workers should observe this precaution.

No typhoid patient should be finally discharged or permitted to work as a food handler until repeated tests for the carrier state have been made and his freedom from infection established beyond a reasonable doubt.

Carriers may engage in other gainful occupations without being a menace to their associates if they observe the necessary precautions in the disposal of their excreta and in personal cleanliness.

SUPERVISION OF MIDWIVES*

C. HERBERT PURDY

Local Registrar, Jacksonville, Florida

In 1911 Dr. Charles E. Terry, former City Health Officer of Jacksonville, took cognizance of the high infant mortality rate in Jacksonville, the rate that year being 167.3 per thousand live births reported. The next two years he made a close study and investigation into the various causes for this extremely high rate. During this period and while considering the high rates that had been prevailing for a number of years he discovered that several factors should be borne in mind which, while making for a high infant mortality, are particularly difficult to control.

Several of these are, to a great extent, peculiar to the South, and even in southern cities vary widely in their effect upon mortality rates and everywhere deserving a close scrutiny and due consideration. In noting the excessive negro infant mortality which was a marked factor in determining the infant mortality in Jacksonville, he found that it was due in greater part to racial problems than to regional conditions. Of almost equal importance to racial weakness as a factor contributory to a high infant mortality is the practice of midwifery in the South.

*Read before the Fifth Annual Meeting of the Florida Public Health Association, Inc., St. Petersburg, December 4-6, 1933.

During 1913 fifty-two per cent of all live births occurring in Jacksonville were attended by midwives. It was impossible to state exactly to what degree the practice of these ignorant women contributed to our infant deaths but we did ascertain that their ministrations at the time of birth operated prejudicially to life. Throughout the period of infancy under consideration, they were in many instances the sole attendants; for example, of all the infants under one year of age dying in 1913, forty-seven were attended from birth to death by midwives.

Some idea of the bearing of this custom on our infant mortality was gleaned by reference to the deaths from tetanus neonatorum. Eleven out of thirteen deaths from this cause were shown by the death certificates to have been attended at birth by midwives while under "convulsions of infants" we found five of the total, eight, occurring at the age period of tetanus neonatorum, i. e., within the first two weeks of life, and these were all attended at birth by midwives.

The classification of deaths, where the sole attendant was an ignorant negro midwife, was probably not accurate. On those death certificates classed under "tetanus" however, the cause is given by the midwife as lockjaw and the symptoms of this disease are sufficiently characteristic to lend credence to the statement, even were there no methods of conducting obstetrical cases to corroborate the diagnosis.

With the knowledge of these facts, we had strong presumptive evidence that besides the 11 deaths attributed to lockjaw occurring in the practice of these women, twenty others were also due to this cause. Accounting for the eleven occurring during the first two weeks of life as probable tetanus, we also had nineteen more which we did not attempt to classify owing to the poorly defined causes. The effect of this ignorant practice was seen mostly among the negroes, and unquestionably played an important role in determining their high infant death rate.

Besides the two foregoing factors, which operated to increase our infant deaths, a third, which we felt always handicaps the southern health official in the carrying out of preventive measures, is the almost utter hopelessness of obtaining results from educational campaigns where the negro is concerned. After studying the white and colored infant mortality for the six previous years, it was shown that there had been a continuous annual decrease in the white infant mortality rate, while the negro rate, albeit subject to considerable fluctuations, had shown but little decrease.

With the negro, not only is knowledge less quickly acquired, but there is constantly operating an agency calculated to offset whatever proper ideas of hygiene and sanitation might otherwise bear fruit, the ignorant and vicious teachings of the midwife. Mention has al-

ready been made of the known and probable frequency of tetanus neonatorum and there was little doubt that other equally grave conditions followed their practice at childbirth.

This problem sorely perplexed the Department for four years. To debar the midwives from practice would at once deprive more than half of the child-bearing women in the city of their customary attendants. Many can afford no better service, nor could the medical profession be expected to undertake this practice for the small remuneration it would afford. After much careful consideration of existing conditions, and the apparent available remedies, a bill regulating the practice of midwifery was presented to the city council. It was promptly voted down on its first appearance, but in December, 1913, it was again introduced. On this occasion it was championed not only by the medical profession, but by a large number of women, for the most part members of the various social and civic organizations of the city.

The ordinance was passed on December 17th, 1913, and became operative on April 1st, 1914. The ordinance provided that it would be unlawful for any person to engage in or perform the duties of midwifery as defined in the ordinance without having passed a satisfactory examination in the elementary principles of midwifery; that it should be the duty of the City Board of Health to provide, free of charge, instruction in the simple principles of midwifery which should comprise such examination; that the City Board of Health should issue certificates to all persons who should obtain, in such examination, a grading of at least 75%; that no test of illiteracy or education of the applicants should form part of the examination; that no fee of any kind should be charged for the examination or the certificate and no instruction or advice should be given to the applicants by anyone connected with the holding of the examination or the issuing of a certificate as to the amount of compensation midwives should receive for their services.

Immediately after the passage of the Midwife Ordinance, its provisions were carried out by holding classes of fifteen to twenty at a time, when talks were given by several physicians who kindly volunteered assistance to the Department in this matter. Obviously, the nature of the lectures was most rudimentary, because of the fact that we had to deal with a class of individuals incapable of understanding any but the simplest teachings. A special emphasis was placed on the meaning of infection, its relation to unclean methods and the importance of prevention through surgical cleanliness, the origin of tetanus and ophthalmia neonatorum and their prevention and the recognition of the most common complications requiring skilled intervention.

In addition the Department has furnished, free to all midwives, outfits for the prevention of tetanus and ophthalmia and has enforced their use up to this day by closely following up their cases. They

have also been required to supply themselves with suitable obstetrical kits and to bring them to the Department at stated intervals for inspections. Their examination was both theoretical and practical and those not obtaining a grade of 75% were debarred from practice. In this way we reduced the number of practicing midwives from 64 to 27, thereby eliminating the most incompetent, while the remaining 27 who received certificates underwent considerable improvement in their technique.

Notwithstanding the fact that we only had one colored visiting nurse on our staff in 1915, the results accomplished in lessening the infant mortality were nothing short of marvelous and exceeded our most sanguine expectations. The infant mortality rate for that year was 82.9 which, up to that time, was the lowest ever recorded in Jacksonville, and a reduction of over one hundred per cent in the rate obtaining in 1911, which was 167.3. During that year the midwives were instructed at the bedside by the nurse, who attended with them 350 confinement cases and followed up many others within a day or two after the birth.

The colored infant welfare nurses have continued up to the present time to visit all maternal cases as soon as the birth certificate has been filed with the Department. In this way it is ascertained whether or not our outfits for the prevention of tetanus and ophthalmia have been used and at the same time the opportunity is employed for maternal instruction and general supervision of the case. The sudden drop to an irreducible minimum in the number of deaths occurring during the so-called "tetanus period" since we began our instructions to midwives and also supplying them with sterile umbilical dressings strongly corroborated our belief that tetanus was playing an important part in the deaths occurring in this period. Our ophthalmia outfit likewise obtained results as only three cases of this infection came under our observation in 1915 as against thirteen in 1914.

Since the Department assumed active supervision over the midwives in 1914 there has been a gradual reduction in the number of deliveries by these women from 49.5 per cent of all live births delivered in 1911 to 34.7 per cent in 1921 and 19.3 per cent in 1931, while it is interesting to note that the number of deliveries in Jacksonville hospitals has increased from 1.2 per cent of all live births delivered in 1911 to 19.7 per cent in 1921, and 51.2 per cent in 1931. Our infant mortality rate of 54.0 in 1932 set a new low for Jacksonville.

In conclusion, I will state briefly that while midwifery as an institution is a necessary evil, a strict supervision over the activities of midwives should form a part of any health program being carried out by municipal and state health agencies.

RELATION OF THE HEALTH DEPARTMENT TO PRIVATE PHYSICIANS*

J. R. McEACHERN, M.D.

City Health Officer, Tampa, Florida

The question of immunizations by Health Department personnel has given rise to considerable criticism by physicians in general practice. This is inevitable at this time on account of the depression when the income of physicians has dropped lower than for years. They see their patients being treated at free clinics and children being immunized against typhoid, diphtheria, and smallpox by Health Department physicians. When Public Health Departments can entirely eliminate from their field of labor curative practice, excepting only treatment of indigent sufferers from communicable disease, it will be relieved of the most frequent cause of criticism from the physicians in general practice. Doctors, and not infrequently medical societies, complain that public health officials vaccinate and immunize children to the detriment of the private physician's income. Public Health cannot abdicate its responsibility to safeguard the health of the community. We can, however, meet the criticism by agreeing to discontinue immunization and vaccination service when and to the degree that the private physician accepts his responsibility by doing this preventive work. We should place the baby requiring immunizations in the private physician's lap with the observation that we are but its guardian and gladly restore it to its natural parents, the family physician. Every doctor has a degree of responsibility in protecting the public health and when he recognizes this and assumes the responsibility, the Health Department will have more money and personnel to devote to sanitary services.

It has been the endeavor of the Tampa Health Department to cultivate friendly understanding with organized medicine as represented by the County Medical Society, and I believe that they understand to a certain extent the difficulties placed upon our Department on account of the reduced budget and of necessity the reduced personnel. With our limited budget, it is almost impossible for the Health Department to employ the proper social service workers to check up the ability to pay of all those who apply for treatment or immunization. Those who are indigent must be taken care of by the Health Department, and we are now beginning to use the social service records of the Emergency Relief Council and the Family Service of the Community Chest. This takes care of those being cared for by these organizations, but there are a great many families not being supported by either of these organizations which have such small incomes that they are not able to pay for medical attention. These also are a burden on our clinics. No doubt, we are imposed on by some people who are able to pay physicians for these services,

*Read before the Fifth Annual Meeting of the Florida Public Health Association, Inc., St. Petersburg, December 4-6, 1933.

but these are weeded out as soon as we find them. When economic conditions become normal again, I believe this condition will right itself with the exception of some that may become pauperized by this depression and the support given them by the Government and charitable organizations. Health Departments, through their city physicians and nurses, should endeavor to correct this condition by helping those only that are unable to pay on account of unemployment and those not able to work on account of some physical disability.

The improvement in the diphtheria mortality rate throughout the country is most gratifying. This disease has shown a steady downward trend over a considerable period of time. The rate of decline for the last few years, however, has not shown the same downward trend. This remarkable decrease in deaths from diphtheria between 1921 and 1929 is unquestionably the direct outcome of the campaign for the protective immunization of children put on by health departments—state, city, and county. It is my belief that if the health departments cease pushing the necessity for immunization and the giving of these immunizations free, then our death rate from diphtheria will start to climb.

The family doctor is usually a very busy man and has not the time or at least has not used the opportunity to educate his people to have their children immunized by him. There is also an economic factor in connection with the vaccination and immunization of children. People are not inclined to spend money until there is an absolute necessity for it. They continue to hope that they will escape infection from these diseases and consequently they neglect to attend to this very important duty. Many people have no regular family physician. When some member of the family gets sick, they consult the neighbors as to whom they shall call, or select a doctor from the telephone directory. The doctor calls once or maybe twice and never sees them again. In no sense of the word can these people be said to have a family physician; consequently, the children in these families will be neglected so far as the general practitioner is concerned.

The private physician should not complain of free vaccinations by health departments as it has been shown by at least one state health department that as soon as a health department puts on a campaign for immunization of children, the amount of toxoid asked for by private physicians increases by a much larger ratio than the amount furnished to health department clinics. I wish the physicians in private practice could arrange to do all this work and be remunerated for it, but it is my opinion that most health officers will find it very difficult to get money for the purpose of paying physicians to do this work in connection with their private practice. I still have an open mind on this subject but with the situation as I see it, I do not believe that it is workable and if attempted, I believe it will result in fewer immunizations and, of course, an increase in the morbidity and mortality rates of these diseases.

TYPHOID FEVER IS NOT NECESSARY

The Only Way to Catch It Is
To Eat or Drink It

Food and water are sometimes contaminated by the discharges of persons sick with the disease and of those who carry the germs without signs of illness.

Anyone who swallows these germs is
very likely to get Typhoid Fever.

“VACATION TYPHOID”

means carelessness and filth — like all Typhoid.

WHEN YOU GO AWAY
WHERE THERE MAY BE DANGER
TAKE THIS ADVICE :

Wash or peel all fruits and vegetables eaten raw.

Buy pasteurized milk. If not available, boil it.

Drink water only after it has been boiled.

Eat only cooked oysters and clams.

Refuse to eat in dirty places.

Don't swim in polluted water.

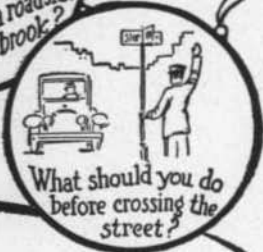
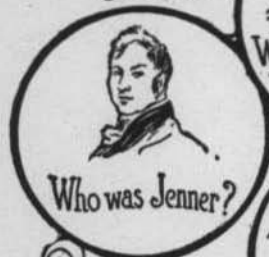
Keep flies away from food.

Wash hands before eating.

FOR ADDITIONAL SAFETY
TAKE THE
ANTI-TYPHOID TREATMENT

A PAGE FOR THE CHILDREN

Can you answer these?



HUMAN LIFE IS THE STATE'S GREATEST ASSET

FLORIDA



HEALTH NOTES

OFFICIAL MONTHLY BULLETIN

ESTABLISHED JULY, 1892

STATE BOARD OF HEALTH
JACKSONVILLE, FLORIDA

Entered as Second Class Matter, October 27, 1921
at the Postoffice at Jacksonville, Florida, Under the Act of August 24, 1912
This Bulletin will be sent to any address in the State free of charge.

Vol. 26

APRIL, 1934

No. 4

Edited by

STEWART G. THOMPSON, D. P. H., Member
American Medical Editors' and Authors' Assn.

ARTICLES

RATS — *Eaton*

MORTALITY, 1933 — *Thompson*

MALARIA CONTROL and FERA — *Lenert*

FLORIDA CHILD AND ITS HEALTH — *Hanson*

FACTS ABOUT COMMUNICABLE DISEASES — *Brink*

HENRY HANSON, M. D., STATE HEALTH OFFICER
Also Executive Officer and Secretary of Board

BOARD MEMBERSN. A. Baltzell, M. D., Pres.
MariannaHarry Dash Johnson, M. D.
Daytona BeachR. L. Hughes, M. D.
Bartow**STATE HEALTH OFFICER**

Also Executive Officer and Secretary of Board

Henry Hanson, M. D.

BUREAUS AT JACKSONVILLE**DIRECTORS**

Laboratories.....	Paul Eaton, M. D., D. P. H.
*Vital Statistics.....	Stewart G. Thompson, D. P. H.
Communicable Diseases.....	F. A. Brink, M. D.
Engineering.....	Louva G. Lenert
Public Health Nursing.....	Ruth E. Mettinger, R. N.
Accounting.....	G. Wilson Baltzell
Librarian.....	Elizabeth Bohnenberger

*Registration Inspector.....	Anna C. Emmons
Drug Store Inspector.....	M. H. Doss
Assistant Drug Store Inspector.....	Frank S. Castor

LABORATORIES

Jacksonville.....	Pearl Griffith, B. E.
Miami.....	E. R. Powell
Pensacola.....	Johnette McCormick
Tallahassee.....	Estelle Bryan
Tampa.....	H. D. Venters, B. S.

MEDICAL OFFICERS

DeFuniak Springs.....	C. W. McDonald, M. D.
Inverness.....	Leland H. Dame, M. D.
Jacksonville.....	W. A. Claxton, M. D.*
Tallahassee.....	H. A. McClure, M. D.
Tampa.....	C. W. Pease, M. D.

*(And Tuberculosis Clinician)

DISTRICT SANITARY OFFICERS

Ocala.....	C. A. Holloway
Orlando.....	Russell Broughman
West Palm Beach.....	S. D. Macready
On "C. W. A." Duty.....	Fred A. Safay
On "C. W. A." Duty.....	T. S. Kennedy, M. D.

PUBLIC HEALTH NURSES

Jacksonville.....	Joyce Ely, R. N. (Asst. Director)
Ft. Pierce.....	Annie Gabriel, R. N.
Jacksonville.....	Johanna L. Sogaard, R. N.
Marianna.....	Lalla Mary Goggans, R. N.
Tampa.....	Julia O. Graves, R. N.

MALARIA RESEARCH

Tallahassee.....	Mark F. Boyd, M. D. (Rockefeller Foundation)
------------------	---

MALARIA CONTROL STUDIES

Jacksonville.....	T. H. D. Griffiths, M. D. (U. S. Public Health Service)
-------------------	--

CONSULTANT IN ENTOMOLOGY

Orlando.....	W. V. King, Ph. D. (U. S. Bureau Entomology)
--------------	---

DIRECTORS FULL TIME COUNTY HEALTH UNITS

Tallahassee, Leon County.....	L. J. Graves, M. D.
Pensacola, Escambia County.....	W. A. McPhaul, M. D.

ADMINISTRATION**Henry Hanson, M.D., State Health Officer****THE FLORIDA CHILD AND ITS HEALTH***

The Florida child is born to a great many advantages not experienced by children born in the North. In this State, children can enjoy the great outdoors all the year. The climate, like that of most tropical countries, is favorable to the young child as well as to the adult.

In all tropical countries life is abundant; vegetation as a rule is riotously profuse and grows rapidly, at the same time manifesting a struggle for supremacy: parasitism is exemplified in a more marked degree than in temperate or cold climates, to the extent that one living thing exists by subsisting on the other. There are vines and trees which attach themselves to and live at the expense of other vines and trees.

There are all kinds of jungle animals, creeping and otherwise, where again we have a demonstration of the survival of the fittest. Among the flying things are the insects which both derive sustenance from man and carry destruction to him. These facts are exemplified by certain mosquitoes such as the *Aegypti* (*Stegomyia*) and the *Anopheles*, nature's two most powerful agents for keeping man, especially the white man, out of the tropics. In order to live a healthy life in the tropics, one must practice constant vigilance over the prevailing insect life to avoid becoming a host for the microscopic living things carried in their bodies.

Florida exemplifies the above to a very marked degree. In countries with a continuously warm climate and abundant rainfall, diseases occur which do not exist in cold, dry climates; such as malaria, yellow fever, relapsing fever, filariasis, leprosy, and a group due to intestinal parasites, e.g., hookworm, amebic dysentery, flagellate diarrheas and various types of skin diseases. On the other hand, some of those which give serious concern in cold climates grow fewer as you approach the equator and all but disappear between the tropics of Cancer and Capricorn except in places of high altitude. Scarlet fever is almost unknown in the tropics, diphtheria rare and measles mild. Scarlet fever and diphtheria are milder diseases in Florida than in the northern states. We have less meningitis and infantile paralysis than the New England States or over the North as a whole. The Florida child is in a mid-zone, in some ways subject to the hazards of the temperate and cold climate and at the same time to a group of tropical diseases.

In the report of the State Board of Health published in 1932, A

*Extracts from an address read before the Florida Congress of Parents and Teachers, Daytona Beach, Florida.

ADMINISTRATION

Decade in Public Health, we find a change in the frequency of occurrence of diseases fatal to children, as follows:

1923		1931	
Tuberculosis	2nd	Tuberculosis	5th
Diarrhea and Enteritis	7th	Auto Accidents	8th
Malaria	9th	Syphilis	9th
Syphilis	13th	Diarrhea and Enteritis	11th
Auto Accidents	14th	Pellagra	13th
Typhoid	15th	Malaria	16th

In both tables representing the twenty greatest killers, the dread scourge of diphtheria is absent. Before the discovery of diphtheria antitoxin, 50% of all children attacked by this disease died. Now less than 8% die, and this rate would be lower if all children with "sore throat" were given prompt and adequate medical attention.

It is not always the great killers only that require attention from the standpoint of the Parent-Teachers Association dealing mostly with the preschool and the school child. The problem of communicable disease is largely limited to young children from one year of age on through the preschool age and the graded schools. If you or we let up on our vigilance and fight on the childhood diseases, diphtheria, smallpox, scarlet fever, typhoid, malaria or the intestinal parasites, etc., the fact will soon be revealed by irregular school attendance and poor quality of work of the pupils.

Things which often escape notice because most people accept them as inevitable are measles, whooping cough and the common colds. Nearly every time I speak on matters of health protection or communicable diseases, I am asked why we do not quarantine measles, German measles, chickenpox, scarlet fever, whooping cough, etc. Lately I have thought the "common cold" should be added to this list. Communicable diseases cannot be controlled to an irreducible minimum by the efforts of the health department alone. The parents must cooperate.

If parents could be persuaded to keep children out of school and quiet in bed from the first notice of onset of the so-called common cold, a great deal of time would be saved to the patient, and many would avoid contracting this disease. The so-called "common cold" is one of the most difficult afflictions of childhood to control, often due to the thoughtlessness of some adult member of the family who while in the stage of onset will fondle the child, or sleeping with it will pass the cold on. Immunity to colds is of short duration. Repeated attacks result in pathological conditions, such as enlarged tonsils and adenoids which in turn predisposes the child to other infections and often calls for operative procedures to remove tissues (tonsils and adenoids) which as a result of the repeated inflammations

ADMINISTRATION

(during colds, etc.) have been converted from nature's filters into seed beds and harbors for the disease producing germs, such as diphtheria, tuberculosis, streptococci, meningococci, etc. Most of the illnesses of the child (as well as the adult) enter the body through the mouth. Diseased tonsils, with the crypts which form, are the lodging places for diphtheria bacilli, etc., and give rise to the conditions known as the carrier.

If all lived proper lives as nature intended, observing true cleanliness, there would be very little sickness of the type referred to in this discussion. Inasmuch as we usually fail to live as we should, we have to resort to artificial means to protect ourselves against the unseen enemies. This is accomplished by smallpox vaccination, toxoid or toxin antitoxin, typhoid vaccine and other products according to the disease involved.

The preservation of health is and can be accomplished by unremitting vigilance. Knowing what we do of these conditions, why not stop visiting our friends, or going to large public gatherings while in the infective state, which in the case of the common cold is during the phase of sneezing, usually the first 2 or 3 days. By all means one should stay away from hospitals, particularly maternity wards. It is a serious matter to pass things of this kind on to nurses, who could scarcely avoid passing it on to the patients in the hospital.

We have not in the past taken up our preventive measures early enough. There has been a delay which has brought us face to face with curative remedies for conditions which never should come up. I would suggest for your consideration the exclusion from school of coughing, sneezing children or children with sore throat or fever, both for their own sakes and the rest of the school. A sick child loses more than he gains by persisting or attempting to keep up with his studies under such conditions.

What has been said so far applies to children in general whether they live in the city or in the country. There are additional factors for consideration in the health of the rural child. Although in itself not a killer, hookworm disease handicaps the rural child more than any other disease known to the medical profession in the South. The prevalence is still surprisingly high, varying from 15% to 80% of the children tested. Very extensive surveys are under way by the nurses, working under the State Board of Health CWS-SNS-1 program, now under the FERA. Our statistics indicate that we still have in the neighborhood of 250,000 persons in this State infected with this energy-sapping disease.

Those of you who live in the cities and spend most of your time there are totally lacking in appreciation of the significance of this as a

ADMINISTRATION

retarding element not only to progress in the schools but to the agricultural development of this State. The spirit shown by many who carry on in spite of such handicaps makes one wonder what they might not do if they were freed from this constant irritant to the lining of the intestinal tract. The victims of hookworm are anemic with 30% hemoglobin average probably 50% to 60%. We are hoping to bring about a reduction of this scourge to rural children through the Community Sanitation Program, a part of the F.E.R.A. activity under Dr. Kennedy's supervision. The rural members of this P.T.A. can be of great help in this campaign.

Second to the hookworm as a rural problem is malaria. Surveys made by Dr. T. H. D. Griffiths, who is our Director of Malaria Control Studies, have shown that from 5% to 15% of school children (assumed to be well) are infected with one or other variety of malaria. A previous survey made by Drs. Boyd and Stratman-Thomas of the Rockefeller Foundation showed that of 3009 white and 2502 colored, or 5511 children in all, from 3% to 28.4% had enlarged (swollen) spleens as a result of repeated attacks of malaria. Individual schools have run as high as 84.2% in school positive, e.g., they had the parasite of malaria in their blood while in school trying to study. 81% of these were estivoautumnal, the type which is responsible for the majority of our malaria deaths. In our report, *A Decade in Public Health*, you can see these details for yourselves. There will be another series of similar observations in the report for the year 1933 which we hope to publish within the next thirty or sixty days.

I firmly believe that many in this State have been and still are on Federal and State relief because they have been incapacitated for work by the conditions which I have described.

Tuberculosis, another of our major handicaps to children, is of considerable magnitude although not as serious a problem as in the northern states. Our open air life, and foods of high vitamin content are powerful allies in holding this universal scourge in check. A series of tuberculin clinics during 1932 showed an infection rate in 5181 white children of 11.8% and for 4290 colored children of 18.4%, the ages of these varying from 5 to 20 years. The rate in the North varies from 19% to 30%.

The infection rate among Florida born children is lower than those given above, being 6.6%.

One of the great needs as an aid to the control of tuberculosis is one or more places where the indigent advanced tuberculosis case can be isolated and cared for. Children contract tuberculosis by living in a home where there is a patient with an active case, coughing and expectorating tubercle bacilli. Most infections are contracted in

ADMINISTRATION

the early years; hence, the advanced active case is a real menace to the child. The P. T. A. can render a valuable service if it will lend its influence to the establishment of two tuberculosis sanatoria in the State. Such a move would be an effective step in the control of the White Plague.

Prevention is more effective than cure, and much cheaper.

BUREAU OF LABORATORIES

Paul Eaton, M.D., D.P H., Director

RATS

The period of gestation in the rat is twenty-one days. When born, baby rats are so nearly transparent that milk may be seen in their little "tummies." At the age of twenty-eight days, they are ready to be weaned and shortly thereafter they are able to look out for themselves.

Three years or thirty-six months in a rat's life correspond to "three score and ten" in a man's life. It will be seen that one month in a rat's life corresponds roughly to two years in a man's life. There is one reason for the extensive use of rats in nutrition experiments. It saves time.

Normally, the female rat is able to bear young at three months of age and remains fertile until the age of twenty or twenty-one months. A female rat in captivity, well fed and protected against accident and injury, has been known to bear a litter every calendar month in the year. These litters average about ten. It will be seen thus that each female rat is the potential mother of one hundred eighty rats in the first generation. Taking into account the fertility of these baby rats it may be calculated that one pair of rats may easily be the progenitors of more than six hundred rats in a year. At the Wistar Institute in Philadelphia, a single pair amounted to more than thirty-eight hundred in sixteen months.

These facts are set down to show how utterly foolish it is to attempt to limit the rat population by trapping, poisoning or other methods of destruction. The killing of a rat merely leaves more food for the survivors, enabling them to breed more extensively. The only way to control the rat is by depriving him of food and harborage.

It has been estimated that there is at least one rat for each inhabitant in this country; that is, one hundred twenty million. There may be many more than that. I am trying to starve mine by keeping the lid on the garbage pail. How are you treating yours?

BUREAU OF LABORATORIES

SUMMARY OF WORK DONE IN THE LABORATORIES OF
THE STATE BOARD OF HEALTH DURING THE
MONTH OF FEBRUARY, 1934

	Jacksonville	Tampa	Pensacola	Miami	Tallahassee	Total
Animal Parasites..	3855	1707	583	189	67	6401
Diphtheria	1152	447	40	1260	28	2927
Typhoid	467	176	14	51	40	748
Malaria	2423	181	20	22	136	2782
Rabies	17	1	..	3	..	21
Tuberculosis	228	94	..	58	16	396
Gonorrhea	733	210	44	171	63	1221
Kahn	4650	1867	234	2319	281	9351
Water .....	..	44	32	180	..	256
Milk	338	277	199	556	57	1427
Miscellaneous	229	14	25	138	8	414
	14092	5018	1191	4947	696	25944
Specimen containers distributed.....						25138

BIOLOGICAL PRODUCTS DISTRIBUTED

Diphtheria Antitoxin.....	10,000 units	43 Packages
	5,000 units	24 Packages
Schick		4710 Tests
Toxoid		4452 C. C.
Toxin Antitoxin.....		420 C. C.
Typhoid Vaccine.....		2319 Treatments
Vaccine Virus.....		2028 Capillaries
Tetanus Antitoxin.....	1,500 units	19 Packages
Antirabic Virus.....		18 Treatments

BUREAU OF COMMUNICABLE DISEASES

F. A. Brink, M.D., Director

FORTY DAYS

An isolation period of forty days for all communicable diseases, from which comes our word "quarantine" was arbitrarily established at a time when little was known about how long a patient or convalescent might remain infectious. There was no way of detecting carriers, in fact a carrier had not been heard of. Disease germs and their manner of getting about were unknown. Because tuberculosis clung to families and passed from one generation to another it was supposed to be hereditary. Malaria was believed to come from breath-

BUREAU OF COMMUNICABLE DISEASES

ing night air or air from a swamp; other communicable diseases were ascribed to the position of the stars, to witchcraft, etc. Charms or amulets were worn (are still worn by some) to ward off disease. The writer once wore one containing asafetida.

Forty days isolation was adequate for most cases but much too long for most diseases. Today we may be doing things that will seem absurd to the sanitarians of future years but it is quite certain that present disease control practices are far more effective than those of fifty years ago. This is shown by the marked decrease of sickness and death from certain diseases.

Rarely do we advise closing school to prevent epidemics. This was once a common practice. Usually exposures are more frequent and intimate out of school than in.

Measles

Sometimes there are so many children sick and out of school with measles, that it is desirable to close on account of the school program. At such a time the epidemic will have reached its peak; nearly all susceptible children have been exposed and the epidemic will subside whether school keeps or not.

It is always desirable to exclude children as soon as they are known to be ill and until the period of communicability is past. This is particularly important in the early part of the epidemic and in measles because it retards the progress of the epidemic and prevents the increase of virulence so common when measles spreads rapidly through a community. Measles becomes epidemic at three or four year intervals. That is because a new crop of susceptible children have been born. Measles is transmitted most readily during the early catarrhal stage and until at least five days after the rash appears. The patient should be kept in bed under the care of a physician. The full two weeks isolation serves to minimize the danger of spreading the disease but, more important to the patient, tends to prevent the dangerous complications.

State Board of Health Adopts Rules

The standard regulations and practices for the control of communicable diseases, recommended by the Committee on Standard Regulations of the American Public Health Association, were adopted by the State Board of Health at its annual meeting held in Jacksonville, March 5, 1934. The following table gives the incubation and isolation periods and other information about certain important diseases.

BUREAU OF COMMUNICABLE DISEASES

Important Facts About Communicable Diseases

DISEASE	INCUBATION PERIOD (The interval between exposure to infection and the first signs of disease).	Day or Definite Illness on which the RASH appears.	Period of Isolation Required After Accidental Exposure to Infection.	Period of isolation required after suffering from the disease.
Smallpox. (Variola.)	First signs any time between the 8th and the 20th day (usually the 12th).	Not before the third day.	Twenty days, unless successfully vaccinated.	Not less than two (2) weeks from onset and until the whole of the skin is free from pustules and from the subsequent desquamation. Special attention to be paid to examination of soles and palms.
Chickenpox.	First signs any time between the 11th and the 19th day (14th day most common).	Successive crops appear from day to day on the 1st, 2nd, 3rd, 4th 5th, and 6th, sometimes even up to the 10th day.	None.	Until scabs have disappeared from mucous membranes and skin. This is two, three, or even four weeks.
Whooping-cough.	First signs any time between the 4th and the 14th day, but the typical whoop may not be heard till later.	No rash. Highly infectious from the beginning of disease and long before the whooping stage.	None, if they have had Whooping-cough; otherwise 7th to 14th day after exposure.	Three weeks from the onset of the characteristic whoop.
Measles.	First signs any time between the 10th and the 14th day.	Fourth, but often the third The patient is highly infectious for three or four days before the rash appears.	None, if they have had measles; otherwise, from the seventh to the fourteenth day after exposure	Until two weeks from the appearance of rash, and until all discharge from the eyes, ears and nose has ceased.
German Measles.	First signs any time between the 14th and the 21st day (usually the 18th).	First or second.	None.	Until eight days have elapsed from the beginning of the illness.
Scarlet Fever. (Scarlatina.)	First signs any time between the 2nd and the 7th day (usually 3rd or 4th).	First.	Seven days.	Three weeks from onset and until abnormal discharges have ceased and sores or wounds have healed.
Diphtheria. (Membranous Croup.)	First signs any time between the 2nd and the 8th day.	There is no rash.	Eight days, or until negative culture from nose and throat.	Until absence of the bacilli from the throat and nose is proved by two consecutive cultures 24 hours apart.
Mumps.	First signs any time between the 12th and the 25th day (usually over a fortnight; less than three weeks).	There is no rash.	None.	Until the subsidence of all swelling.
Typhoid Fever.	First signs any time between the 4th and the 21st day (usually from the 10th to the 14th).	From the 7th day until the commencement of the decline of the fever.	None.	Until recovery is complete.

BUREAU OF COMMUNICABLE DISEASES**PELLAGRA**

Diet is the chief factor in the prevention of pellagra. Persons who include in the diet a reasonable amount of fresh lean meat, milk, fruit and vegetables do not have pellagra. Many farmers, and townspeople as well, have learned that home production of these important foods is good for the pocketbook as well as the health of the family.

DR. E. R. MARSHBURN

On March 24, 1934, Dr. E. R. Marshburn, District Health Officer since August 1, 1933, passed away at his home in Marianna. The members of the State Board of Health staff share with his family the loss of this man of unusually high character. His training and experience, his unselfish interest in his work and his pleasing personality fitted him well to serve as a guardian of the public health.

Dr. C. W. McDonald, who has been on a detail to the East Coast district with headquarters at West Palm Beach, has been transferred to the district west of the Apalachicola River with headquarters at DeFuniak Springs.

Temporarily Dr. W. A. Claxton will serve in the East Coast District but he should be reached through the State Board of Health at Jacksonville.

The Florida Medical, Dental and Pharmaceutical Association (colored) met and carried out an excellent program of scientific papers, discussions and clinics in Tallahassee during the week of April 2nd. Representing the State Board of Health, Dr. F. A. Brink delivered an address before an attentive and appreciative audience of 100 members of the Association and guests.

BUREAU OF ENGINEERING

Louva G. Lenert, Director

MALARIA CONTROL AND THE FERA

The new program of the FERA gives greater promise for constructive malaria control work than has been possible at any time in the history of the State or will ever be possible again on a widespread scale. In the first place, it is work of a public health character and is thus in class one on the preferential list of projects with the Relief Administration.

Quite as important in securing the results for the purpose in-

BUREAU OF ENGINEERING

tended, the arrangement now provides for all work of this character to be conducted under the direction and supervision of the State Health Officer under a State project in which he has been designated as the State Supervisor. The necessity for the work as well as the methods of operation are thereby vested in a single authority, whose education, training and experience are necessary requisites for the office which he holds and, therefore, for the direction of the malaria control program.

Malaria control by drainage is not always justified, it being necessary to consider many factors besides mere elimination of water area. Florida lands in general have a ground water table fairly close to the surface and the nature of the soil is such that when this water table is lowered too much vegetation suffers from lack of moisture. If the general policy of draining every body of water, which is the conception of some as being correct mosquito control procedure, were carried out, some of our most valuable assets would be destroyed. In general, if a body of water can be maintained mosquito-free without draining, at a cost approximating that of ditch maintenance, then drainage is not the correct procedure. A shallow pond, a heavy producer of *Anopheles* mosquitoes, can sometimes be made into a very attractive lake by cleaning and maintenance of the edges, doing away with future ditch cleaning operations. Ditching is very much the same as highway construction in that both are valueless without maintenance and though the first cost may be slight, maintenance should be reasonably certain before they are undertaken.

A drainage ditch may be and often is quite as heavy a producer of *Anopheles* mosquitoes as the swamp which it has eliminated and in such cases the work is of no value as a malaria control measure. Where large ditches are necessary their design should be studied very carefully. Flat bottoms are particularly obnoxious from the sanitarian's point of view. The writer vividly recalls a twelve-foot, flat, concrete-lined ditch through the heart of a small community as being the principal source of production for *Anopheles* mosquitoes, and therefore it was justly charged as the cause of malaria where none existed before. A three-foot flat bottom roadside ditch just penetrating the ground water seepage strata is quite as bad and sometimes worse than the pioneer railway borrow-pits which received such severe condemnation when malaria control through drainage received its first great impetus immediately following the great war. Ditch design in an endemic malaria section should always be such that between rains the water in the ditch will be concentrated over as small an area as possible and will have a maximum velocity. Roadside drainage ditches with flat bottoms have a tendency during dry weather periods to hold water over the entire bottom, insignificant to road drainage, but water one-fourth inch in depth with a generous supply of algae growth is ideal for *Anopheles* production. This con-

BUREAU OF ENGINEERING

dition may be obviated or lessened if the bottom of the ditch in cross-section were not made level, sloping the bottom away from the road-bed and concentrating the entire flow in a small area at or near the edge of the slope. Large ditches may require smaller ditches in the bottom to care for dry weather flow.

The point to be made is that from the viewpoint of the sanitarian alone stormwater flow is of no consequence. Water flowing in clean ditches is quite as satisfactory as dry ditches and it is only when it becomes sluggish or static that troublesome mosquito breeding occurs. A drainage system which disposes of water through ditches flowing constantly over a period of a week after the last rainfall is entirely effective for mosquito control, while a system designed to carry off all flood waters in a day's time through large flat bottom ditches, which are not designed to carry off the dry weather flow after the flood waters have subsided, is often of no value as a malaria control measure.

Malaria control drainage is, therefore, not a function of the irrigation, drainage or highway engineer until its principles are further understood and put into practice. As long as the engineer on public works fails to recognize the additional safeguards to be considered beyond mere storm water drainage, it will be necessary to depend entirely on the sanitarian for malaria control by draining.

Not always is it practicable or feasible to secure malaria control by drainage. Ditches which are not maintained, though they are constructed free of cost to the community, eventually prove valueless and bring discredit to the program of malaria control. The drainage of large swamp areas in sparsely settled districts should not be considered. It is far better in such cases to encourage the population to screen their homes and thus obtain protection from the bite of infected mosquitoes.

Under the supervision of the State Health Officer malaria control operations of the FERA will include conditioning of streams, drainage (only for mosquito control), and screening of homes where it is not considered feasible to control mosquito production. The latter will be undertaken on the basis of property owners paying the cost of all materials, the work being done with FERA labor, supervised under this State project. Local health authorities may be of great value to their own communities by encouraging the assignment of the maximum number of those on work relief to these projects.

With a unification of effort and by working on a long time plan, there is no reason why some outstanding accomplishments cannot now be worked out which will be of lasting credit to the FERA and the State Board of Health, in addition to providing labor and deserved relief for those engaged in the work.

BUREAU OF VITAL STATISTICS**Stewart G. Thompson, D.P.H., Director****MORTALITY, 1933**

The death rate from all causes in Florida for 1933 was practically the same as for each of the two previous years. In 1918, owing to the influenza epidemic, the death rate rose to 17.1 in Florida as compared with 18.1 for the United States Registration Area. The mortality rates for the following years declined very rapidly until 1923 and from 1923 to 1926, the death rate in Florida from all causes rose to a peak of 15.6 which was largely due to what was known as the Florida Boom. From 1926 to 1931, the rate gradually declined and for the past three years has averaged about 12.0 per 1,000 population. Between 1917 and 1923, the mortality rates in Florida followed closely the rise and fall of the mortality rates for the United States Registration Area. From 1923 to 1928, however, the mortality rates in the Registration Area were much lower than for the State of Florida. Between 1928 and 1933, the mortality curve for the State of Florida follows approximately the same trend as for the United States Registration Area but the Florida rates for those years were considerably higher than for the Registration Area.

In 1932, there was a total of 18,293 deaths in Florida as compared with a total of 18,764 for 1933. This is an increase of 471 deaths but because of the increase in population, the rate for 1933 is practically the same as for the two previous years.

It is very encouraging to note the reduction in the number of deaths from typhoid fever for the calendar year 1933 as compared with the previous year. There were 65 deaths charged to typhoid fever in 1933 as compared with a total of 85 for the previous year.

Another very encouraging fact is the decrease in deaths from diphtheria. There was a total of 56 deaths from diphtheria in 1933 as compared with a total of 83 for the previous year. This unusual reduction in the number of deaths from diphtheria speaks well for the immunization program in the State of Florida.

There was a slight reduction in the number of deaths from tuberculosis (all forms). In 1933, there were 1,039 deaths from this cause as compared with 1,093 for the previous year.

Cancer shows a slight increase. In 1933, there was a total of 1,284 deaths as compared with a total of 1,244 for the previous year.

Deaths from diseases of the heart totaled 3,053 for 1933 as compared with a total of 2,989 for the previous year.

In 1933, there were 495 deaths from automobile accidents as compared with a total of 481 for the previous year.

BUREAU OF VITAL STATISTICS
MORTALITY FOR 1933 AS COMPARED WITH THE
PREVIOUS YEAR

Int'n'l List No. (1929)	FLORIDA	NUMBER OF DEATHS					
		1933			1932		
		Total	White	Col.	Total	White	Col.
	GENERAL MORTALITY (ALL AGES)						
1-214	ALL CAUSES.....	18,764	11,561	7,203	18,293	11,294	6,999
1-2	Typhoid	65	33	32	85	36	49
6	Smallpox	0	0	0	0	0	0
7	Measles	3	2	1	11	7	4
8	Scarlet Fever	10	9	1	7	6	1
9	Whooping-cough	44	24	20	31	17	14
10	Diphtheria	56	45	11	83	72	11
11	Influenza	608	334	274	514	260	254
16	Acute Poliomyelitis and Acute Polioencephalitis	9	7	2	9	8	1
17	Lethargic Encephalitis	10	10	0	6	5	1
18	Epidemic Cerebrospinal Meningitis	9	9	0	3	2	1
23-32	Tuberculosis (all forms).....	1,039	398	641	1,093	395	698
38	Malaria	373	207	166	233	123	110
45-53	Cancer (all forms).....	1,284	1,045	239	1,244	1,040	204
59	Diabetes Mellitus	246	198	48	247	188	59
62	Pellagra	193	69	124	199	67	132
78-89	Diseases of the Nervous System	1,927	1,187	740	1,960	1,196	764
82-A-B	Cerebral Hemorrhage, Cerebral Embolism, Thrombosis.....	1,413	872	541	1,442	898	544
90-103	Diseases of the Circulatory System	3,337	2,384	953	3,276	2,302	974
90-95	Diseases of the Heart.....	3,053	2,187	866	2,989	2,095	894
104-114	Diseases of the Respiratory System	1,107	588	519	1,029	594	435
107-109	Pneumonia (all forms).....	917	479	438	847	486	361
115-129	Diseases of the Digestive System	1,278	785	493	1,372	841	531
119	Diarrhea and Enteritis (under 2 years).....	127	71	56	186	108	78
130-139	Nonvenereal Diseases Genito- urinary System.....	2,128	1,368	760	2,010	1,314	696
130-132	Nephritis (all forms).....	1,824	1,200	624	1,722	1,141	581
140-150	Diseases of Pregnancy, Child- birth and the Puerperal State.	285	154	131	262	149	113
(176-194							
(201-214	All Accidents.....	1,372	948	424	1,338	924	414
206,208	Collisions (R.R.-Auto) and (Street Car-Auto).....	52	34	18	15	10	5
210	Automobile Accidents.....	495	368	127	481	363	118
211	Motor-cycle Accidents.....	4	4	0	10	10	0



HUMAN LIFE IS THE STATE'S GREATEST ASSET

FLORIDA



HEALTH NOTES

OFFICIAL MONTHLY BULLETIN

ESTABLISHED JULY, 1892

STATE BOARD OF HEALTH
JACKSONVILLE, FLORIDA

Entered as Second Class Matter, October 27, 1921
at the Postoffice at Jacksonville, Florida, Under the Act of August 24, 1912
This Bulletin will be sent to any address in the State free of charge.

Vol. 26

MAY, 1934

No. 5

Edited by

STEWART G. THOMPSON, D. P. H., Member
American Medical Editors' and Authors' Assn.

ARTICLES

MEDICAL PROGRESS — *Eaton*

MATERNAL MORTALITY—*Hanson*

CWA NURSING PROGRAM — *Mettinger*

BATHING AND SWIMMING — *Lenert*

INFANT MORTALITY, 1933—*Thompson*

COMMUNICABLE DISEASE TECHNIQUE — *Brink*

HENRY HANSON, M. D., STATE HEALTH OFFICER
Also Executive Officer and Secretary of Board

BOARD MEMBERSN. A. Baltzell, M. D., Pres.
MariannaHarry Dash Johnson, M. D.
Daytona BeachR. L. Hughes, M. D.
Bartow**STATE HEALTH OFFICER**

Also Executive Officer and Secretary of Board

Henry Hanson, M. D.

BUREAUS AT JACKSONVILLE**DIRECTORS**

Laboratories.....	Paul Eaton, M. D., D. P. H.
*Vital Statistics.....	Stewart G. Thompson, D. P. H.
Communicable Diseases.....	F. A. Brink, M. D.
Engineering.....	Louva G. Lenert
Public Health Nursing.....	Ruth E. Mettinger, R. N.
Accounting.....	G. Wilson Baltzell
Librarian.....	Elizabeth Bohnenberger

*Registration Inspector.....	Anna C. Emmons
Drug Store Inspector.....	M. H. Doss
Assistant Drug Store Inspector.....	Frank S. Castor

LABORATORIES

Jacksonville.....	Pearl Griffith, B. E.
Miami.....	E. R. Powell
Pensacola.....	Johnette McCormick
Tallahassee.....	Estelle Bryan
Tampa.....	H. D. Venters, B. S.

MEDICAL OFFICERS

DeFuniak Springs.....	C. W. McDonald, M. D.
Inverness.....	Leland H. Dame, M. D.
Jacksonville.....	W. A. Claxton, M. D.*
Tallahassee.....	H. A. McClure, M. D.
Tampa.....	C. W. Pease, M. D.

*(And Tuberculosis Clinician)

DISTRICT SANITARY OFFICERS

Milton.....	T. S. Kennedy, M. D.
Ocala.....	C. A. Holloway
Orlando.....	Russell Broughman
West Palm Beach.....	S. D. Macready
On "FERA" Duty.....	Fred A. Safay

PUBLIC HEALTH NURSES

Jacksonville.....	Joyce Ely, R. N. (Asst. Director)
Ft. Pierce.....	Annie Gabriel, R. N.
Jacksonville.....	Johanna L. Sogaard, R. N.
Marianna.....	Lalla Mary Goggans, R. N.
Tampa.....	Julia O. Graves, R. N.

MALARIA RESEARCH

Tallahassee.....	Mark F. Boyd, M. D. (Rockefeller Foundation)
------------------	---

MALARIA CONTROL STUDIES

Jacksonville.....	T. H. D. Griffiths, M. D. (U. S. Public Health Service)
-------------------	--

CONSULTANT IN ENTOMOLOGY

Orlando.....	W. V. King, Ph. D. (U. S. Bureau Entomology)
--------------	---

DIRECTORS FULL TIME COUNTY HEALTH UNITS

Tallahassee, Leon County.....	L. J. Graves, M. D.
Pensacola, Escambia County.....	W. A. McPhaul, M. D.

ADMINISTRATION

Henry Hanson, M.D., State Health Officer

MATERNAL MORTALITY

Two hundred and eighty-five (285) mothers died in Florida in 1933 in the effort to fulfill the function assigned to woman by the Almighty Ruler of the Universe. For the purpose of comparison with other states, the maternal death rate is computed on the basis of the number of maternal deaths per 1000 live births. Florida's maternal death rate is 11.1 for 1933. This rate is too high and we are making a detailed study of all factors concerned, hoping that we may find a solution to lower this rate.

Some of the causes, we know. One of them is ignorance on the part of the mother as to how she should live after she knows she is pregnant. Another is the ignorance of those who are to serve in the capacity of a midwife, or otherwise, at the time her baby is born.

It has been said that at least 60% of the deaths associated with childbearing are avoidable. In this State, that would indicate 114 women would die each year which would still give us a high rate. To reduce the high mortality, one must direct effort toward channels other than the medical or the midwife, e.g., legislative. During each of the last two years there have been two or three deaths each year of mothers between the ages of 10 and 14 years; and fifty to sixty deaths, or more, in the age group between 15 and 19 years. Children of this age are not sufficiently matured, either physically or mentally, to undertake motherhood. What should we do about it? What can we do?

We are asking our medical societies to make a study of the causes of the maternal deaths which occur in the territory or district in which the members of each society practice, while we are making a study of what is happening among the midwives.

It seems that a program of Child Welfare (which may be a good term) was introduced in the summer of 1922 when the first Sheppard-Towner funds became available. The first step consisted of a midwife survey which revealed the fact that there were more than 3,449 women (and some men) who were practicing midwifery in Florida. Naturally, the majority of these were ignorant and unfit for the work, consequently a menace to the women they waited on. The midwife, although an ancient institution, appears to have been a bone of contention for a long time. A hundred or so years ago it was beneath the dignity of a physician to do obstetrical work. Some of the practices associated with childbirth were such as seem incredible today and the death rates of both children and mothers were high.

Civilization seems to have been a curse to the woman who wished

ADMINISTRATION

to be a mother. The so-called uncivilized people do not have the same difficulties of suffering and death due to or associated with childbirth that our women have. From this, it might seem that we should revert to the life lived by primitive peoples who have not adopted all of the restrictions of freedom of physical motion and the inactive life of women in this country. "Educate both the lay public and the medical profession to an understanding of the necessity for change in certain of the methods now employed."

In Florida we were unable to make any marked progress with the midwives until after the enactment of the Midwife Law (Chapter 14760, Acts of 1931) and are still handicapped because of defects in the law such as the lack of a penalty clause for those (who usually are unfit) who persist in practicing without license or registration. For those who show an inclination to comply, we hold institutes where they have an opportunity to learn the elements of proper care of mother and child.

LIBRARY

Recent Additions to the Library

- White, W. A.—*Outlines of Psychiatry*. Wash., Nervous and Mental Diseases Pub. Co., 1929.
- Moore, J. E.—*Modern Treatment of Syphilis*. Springfield, Thomas, 1934.
- Reid, E. G.—*The Great Physician*. N. Y., Oxford, 1934.
- Dublin, L. I.—*The History of Longevity in the United States*. Balt., Johns Hopkins Press, 1934.
- Major, Ralph H.—*Classic Descriptions of Disease*. Springfield, Thomas, 1932.
- The Medical Profession and the Public; Currents and Counter-currents*. Containing papers read at a joint meeting of The College of Physicians of Philadelphia and the American Academy of Political and Social Science, in Philadelphia, February 7, 1934. Phila., The Academy, 1934.

BUREAU OF PUBLIC HEALTH NURSING

Ruth E. Mettinger, R.N., Director

CWA NURSING PROGRAM

Effective February 1, all local nursing projects were discontinued and were placed under a general state-wide nursing program directed by the State Board of Health. Before the assignment of CWA nurses to public health positions in the counties, the executive board of the State Nurses Association appointed committees in each district

BUREAU OF PUBLIC HEALTH NURSING

to make a survey of unemployed nurses, a list of which was sent to the State Board of Health. From this list of unemployed, nurses were assigned to the counties.

It is generally conceded that hospital training is not sufficient preparation for public health nursing, but since this project is primarily for unemployed graduate nurses residing in the State and it was impossible for public health trained nurses to be secured, district supervisors with public health training and experience were placed at central points throughout the State to assist the nurses with their program and to introduce the nurses to the field and give continuous supervision.

Since the primary factor of the nursing service is to give nursing care to the clients on federal relief, the Social Service Director in each county was asked to give office space to the nurse, so there could be close cooperation between the two workers.

The most important safeguard to a sound public health program is to have the support of the County Medical Society. Therefore, immediately after the assignment of the nurse to a county, the Medical Society was given a copy of the following "Standing Orders" with the request that they be signed and returned to the nurse:

Standing Orders*

Definition: Standing orders are those orders for treatment and medication, endorsed by each local medical advisory committee, to be used only when there is no physician in attendance or when previous orders have not been left by the attending physician; in which case, they should be used only until it has been possible to communicate with the physician. The following are examples of standing orders frequently used:

All New Patients: General or partial care as required. Isolate if communicable disease is suspected. Instruction in hygiene of the sick room with special emphasis on good ventilation and cleanliness.

Obstetrical Cases: For the mother, cleansing bath. Change pads. Perineal irrigation with $\frac{1}{2}\%$ of lysol solution. Leave in warm, dry bed. In confinement cases preceding delivery (a) arrange bed; (b) have plenty of hot water; (c) give soapsuds enema; (d) shave if advised by doctor to do so, and sponge with $\frac{1}{2}\%$ lysol solution. For baby, oil and bathe. Sterile cord dressing. Keep warm.

Postpartum Hemorrhage: Send someone else for physician immediately. Elevate foot of bed. Put patient in elevated Sim's position. Keep patient quiet and warm. No hot drinks.

Patients with Elevated Temperature: Put to bed. Advise liquid diet and plenty of water. Sponge for temperature of 102 degrees to 105 degrees.

BUREAU OF PUBLIC HEALTH NURSING

Infants and Children with Elevated Temperature: Put to bed. Advise liquids, but no milk until ordered by physician. Saline or soap-suds enema if no abdominal pain or tenderness is present.

Infantile Diarrhea: Urge attendance of physician. Boiled water and barley water may be given but no milk.

Infantile Convulsion: Urge immediate attendance of physician. Hot mustard bath ($\frac{1}{2}$ tablespoon of mustard to one gallon of water) and warm soap-suds or normal saline enema should be given at once. No food.

Constipation in Infants: Advise enema or soap stick. If condition is habitual, physician's advice should be urged.

Burns: Remove clothing with greatest of care. Apply a wet dressing of saturated solution of bicarbonate of soda or normal salt solution. If burn is severe and there is no physician, treat for shock and remove to hospital as quickly as possible.

Discharging Ears: Cleanse the outer ear with boric solution swabs; dry thoroughly; do not irrigate. Urge immediate medical attention.

Earache: No treatment. Refer to physician.

Minor Injuries (Cuts, Scratches, etc.): Cleanse around injury with soap and water, if necessary, and apply iodine and a dry dressing.

Sore Throat and Colds: Isolate, if possible, until physician sees patient. Liquid diet. Plenty of water.

Ulcers (Chronic): Cleanse with normal salt or boric acid solution. Apply hot dressing of either solution and a firm bandage.

Pressure Sores: Remove pressure and apply zinc ointment or paste of castor oil and bismuth. If neither is available on first visit, use vaseline on dressing.

Standing Orders for School Nurses*

The following are samples of standing orders frequently obtained by the school nurse:

Foreign Body in Eye: Have patient wash eye with a 2% boric acid solution, using eye cup. If this does not dislodge the foreign body and it cannot be brushed from the eyeball or the rolled back eyelid with a twist of sterile cotton, a physician should be consulted.

Infections: Apply wet boric acid or saline dressings. Recommend physician or clinic.

Nose Bleed: Have child sit in chair with head thrown back. Insert moist cotton inside upper lip to make pressure against nostril. Apply cold compress to back of neck. Do not wipe or blow nose. Have child lie down before returning to class or going home.

Toothache: Send note to parent recommending the family dentist or a dental clinic.

Ringworm of Scalp, Face or Body: In mild cases, scrub with tincture of green soap and cover with flexible collodion or apply 2% ammoniated mercury.

BUREAU OF PUBLIC HEALTH NURSING

Pediculosis: Saturate scalp and hair with mixture of equal parts kerosene and sweet oil. Next day, wash with a solution of sodium bicarbonate (one teaspoonful to one quart of water) followed by soap and water. To remove nits: After the above treatment, wet hair with hot vinegar, wrap in a towel and leave for half an hour; part hair and brush upwards with a stiff brush; pull off nits that do not yield to the brush.

Impetigo: Remove crusts with tincture of green soap and apply 2% ammoniated mercury.

Scabies: Wash with tincture of green soap and apply sulphur ointment. Home treatment usually consists of: Hot bath using hand-brush and soap to open the burrows. Apply sulphur ointment daily over body for four days. Wear same underclothing for four days. On fourth night take a second hot bath to be followed by an oil rub. Dress in fresh clothes. Put clean, recently boiled sheets and pillow cases on the bed. Use a hot iron on all other clothes and bed clothing. If at the end of four days the condition is not cured, the treatment should be repeated unless the skin shows signs of irritation. If irritation is present, the use of sulphur should not be continued without medical attention.

"Standing Orders" are followed only when a physician is not in attendance when the nurse makes the first visit. Repeated visits to the patient are not made unless a physician is called on the case. When a nurse finds there is no doctor in attendance and the patient is in need of a physician the Social Service Director is notified, who requests a physician to visit the case. If charges are to be made, such charges are paid from the local FERA funds and charged to direct relief. Medicines are only supplied for the individual case upon the request of the doctor and charged to local federal relief. Upon the assignment of a physician to a case, the nurse immediately gets in touch with him to receive definite instructions as to the nursing care desired.

The nurse should use every opportunity to make her visit to the home of permanent value by giving instruction to the family in the care of the patient and such advice as to sanitation and personal hygiene as may be necessary. For the physician's information bedside notes are left in the home of the patient, recording the care which has been given by the nurse.

When the State Nursing Service was inaugurated, the set-up allowed a certain number of nurses throughout the State. At the present time CWA nurses have been assigned to sixty-four counties; the three counties omitted did not feel the nursing service was needed. One hundred and seventy-nine (179) nurses have been employed under the FERA program.

* Taken from The Manual of Public Health Nursing.

BUREAU OF ENGINEERING**Louva G. Lenert, Director****BATHING AND SWIMMING**

Certainly one cannot go swimming in a bath tub or under a shower, but then why should anyone want to do so. The tub or shower is not even suitable for a make-believe swim. The combination of a tub of water and a cake of soap is wonderful, however, for obtaining that clean, fresh, satisfying sensation which follows a bath and a good rub-down.

A few years back fumigation was very generally practiced for the purpose of killing germs and bacteria in homes and buildings. As more was learned of the causes of disease and the method of controlling its spread we found that with the exception of controlling insects, fumigation had little value in disease prevention. Warm water, soap and "elbow grease" are now recommended for cleaning up and preventing the spread of infections in the home.

That same recommendation is made for keeping the body clean. Water alone is insufficient. It must be used with soap to combine with the body oils and remove accumulations of dust and body wastes given off through the pores of the skin. Water and soap applied with "elbow grease" is the only effective formula for a successful bath.

One takes a sun-bath by exposing the body to the rays of the sun, and a turkish bath by exposure to steaming vapors, but one cannot take a cleansing water bath by simple immersion in a body of water. It must be accompanied by energetic rubbing and the application of soap with the water.

Enough of bathing, which is properly done in private, in the nude, under a shower or in the tub. In summer the creeks, lakes, rivers, beaches and pools become popular "bathing" places. It is unfortunate that the word "bathing" is used when speaking or writing of swimming resorts.

Just as one cannot go swimming in the bath tub, it is not probable that one will go bathing in a body of water frequented by the public. The old swimming hole was not popular to every boy in town because of its cleansing qualifications. Those same boys often had to be scrubbed extra for having gone in. It was the sport and need of giving vent to their pent-up vitality that proved so attractive—not a bath.

Swimming is becoming more popular each season for recreation and physical exercise. In the old days fifteen or twenty boys gathered at the "swimming hole" on Saturday and found a week's enjoyment

BUREAU OF ENGINEERING

in a few short hours. The creeks and rivers in which these swimming places were located carried little waste matter compared to present-day streams. In our rapid development of cities, railways and highways, we have not kept pace in the treatment and disposal of our wastes, a continuously difficult problem accompanying increased population. With the increasing popularity of swimming there comes a greater congestion of the resorts—lake, Gulf, Ocean or pool, and an accompanying increase in contamination of the water under the heavier bathing load.

Under the recent CWA program and continuing under the FERA we have seen the addition of many swimming pools, recreation parks and "bathing" beaches, and no doubt this will give a further impetus to this popular and most excellent sport and recreation.

There are still many people who wonder why there should be showers in connection with the dressing rooms when such a wonderful "bathing" place was available. Some still feel that the shower is provided for cleansing oneself after a swim. The sign on the wall of the dressing room directing him to take a shower before entering pool is assumed to mean "the other fellow" who really needs washing off. The public thus becomes its own worst enemy in refusing to abide by the rules and protect itself.

Health regulations are made *for* and *not against* the public. Bathing and swimming are not synonymous, but they are, or should be, inseparable. Everyone entering a public swimming place should first be clean. Not apparently clean, but actually cleansed by the process of bathing with soap and water. For public health protection bathing should always precede swimming. After emerging it becomes a matter of personal preference or desire, as the hazard to the public no longer exists. It is for this reason that swimming pool operators are required to insist on showers before entering the pool, and after each visit to the toilet. Other bathing resorts are so affected in varying degree, depending on the bathing load and the renewal of fresh water supply.

Equally important in public health are proper toilet facilities at every swimming resort, sufficient to care for maximum attendance. It hardly becomes necessary to mention dangers of insanitary excreta disposal around swimming places where fecal matter may be tracked on to the walks and into the water by human beings or other animals. Any resort without approved sanitary facilities should be avoided as dangerous to public health.

BUREAU OF COMMUNICABLE DISEASES**F. A. Brink, M.D., Director****COMMUNICABLE DISEASE TECHNIQUE**

While the technique of handling communicable disease patients with a minimum degree of danger to the attendant seems simple enough to the well-trained physician or nurse, we should ever bear in mind that this technique was developed through centuries of discovery by trial and error methods and that years of study in books, classrooms and laboratory are necessary in order that these professional workers may develop a germ consciousness—the ability to avoid getting or transmitting the organisms or virus of disease.

It is annoying to a health officer to see a mother attending her child, ill with diphtheria, although having been carefully instructed about precautionary measures, send another child to bring water for the patient, then hand the half emptied dipper back to the well child who drinks the remaining water and returns the empty dipper to the bucket. Many mothers have done just that and made other technical errors equally absurd. There are, on the other hand, many mothers who grasp readily the instructions they receive from the doctor or health officer, study diligently to perfect their technique and are alert to carry out every detail of the isolation program. Because of their personal interest—their eagerness to protect their own, many such mothers can be trusted with a communicable disease case almost as well as a graduate nurse.

Whether the patient's disease is transmitted by the saliva or by the stools and urine, the safest plan is to regard the patient's entire environment as a field of danger and, so far as possible, avoid contact with all the discharges.

No article soiled or used by the patient should leave the sick room except through some sterilizing process such as boiling, burning or chemical treatment. The attendant should never sit on or allow the clothing to touch the sick bed. Only the hands need become contaminated and the danger is minimized if they are thoroughly cleansed with soap and water after waiting on the patient and before any other household task is performed. A rinse with rubbing alcohol or an antiseptic approved by the doctor will give added security and peace of mind.

Secondary cases are those which occur in the immediate household after an interval from the onset of the initial case which corresponds with the incubation period of the disease. They were rather common twenty or thirty years ago but in these days of enlightenment their occurrence suggests that something is wrong with the technique.

It is traditional that a physician will render a service, not alone of a sort that aims to cure the patient but also one that protects the

BUREAU OF COMMUNICABLE DISEASES

rest of the family. This he regards not merely as his duty but his privilege. To him comes first and most often the opportunity to safeguard the family, to instruct the mother or other untrained attendant in the intricacies of communicable disease technique, sterilization and disposal of discharges. If a nurse is on duty, she takes much of this responsibility. If not, then the service of a public health nurse will be found exceedingly helpful.

The health department is vitally interested in all this, of course, and eager to do everything necessary to protect the family but its greatest usefulness is in preventing the spread of disease from one household to another. The medical health officer, the public health nurse and the sanitary officer have given and are now giving service of incalculable value in preventing sickness and death from contagious, infectious, communicable diseases. While their training enables them to protect themselves to a great extent, they are never out of danger; many of them sicken and not a few die of disease contracted in the line of duty, yet they never falter, never fail in time of need. Those who quail in time of danger are certain to find a field of endeavor more to their liking.

BUREAU OF LABORATORIES

Paul Eaton, M.D., D.P.H., Director

MEDICAL PROGRESS

During the years 1889 to 1894 this country experienced a major economic depression comparable to that of more recent memory. Recovery was not instantaneous (which would have been a miracle), but gradual. It was, however, complete and merged into the greatest period of prosperity and progress ever known.

It is but natural for those of us of the State Board of Health who have lived through both of these cycles to institute some comparisons as to the state of advancement of medical science at the close of the two periods just mentioned. Let us compare 1894 with 1934.

In 1894 it was not known that hookworm disease constituted an enormous handicap to a section of the country most highly favored by nature, the South. In 1934 diagnosis of this condition is easy, treatment safe and relatively certain and prevention easily attainable.

In 1894 the means by which malaria and yellow fever were transmitted was a dark and tragic secret. In 1934 the prevention of these major scourges is easily possible. In 1894 that form of energy known as X-rays had not been discovered and it would not have been possible for any human mind to imagine the uses to which this agency might be put in diagnosis and treatment.

BUREAU OF LABORATORIES

In 1894 only a scant half dozen operations had been undertaken for the relief of appendicitis, a very frequent cause of fatal "inflammation of the bowels."

In 1894 diphtheria caused the death of from 25 to 35 out of every 100 persons suffering from it and was so widespread as to be the cause of from 6 to 9 per cent of all deaths. In that year the first antitoxin for this disease made in this country was made in New York City. In 1934 prevention is easily attainable and treatment (begun early enough) is almost absolutely certain.

In 1894 the cause of syphilis was not known and treatment for this disease left much to be desired. In the 40 years under discussion advances have been made in our knowledge of scarlet fever, diabetes, pernicious anemia, certain forms of tumor affecting women and other diseases too numerous to mention.

These moral reflections are indulged in for the purpose of getting you to see that in our next sprint in the race toward civilization we are not starting from "scratch," but have an enormous lead.

SUMMARY OF WORK DONE IN THE LABORATORIES OF
THE STATE BOARD OF HEALTH DURING
THE MONTH OF MARCH, 1934

	Jacksonville	Tampa	Pensacola	Miami	Tallahassee	Total
Animal Parasites...	11606	2032	704	247	69	14658
Diphtheria	665	353	53	601	51	1723
Typhoid	749	197	20	106	201	1273
Malaria	3405	217	29	45	16	3712
Rabies	9	2		1		12
Tuberculosis	314	118	28	68	26	554
Gonorrhea	821	292	48	165	60	1386
Kahn	5094	2204	271	2031	312	9912
Water		70	36	220		326
Milk	262	348	109	461	81	1261
Miscellaneous	319	23	4	238	4	588
	23244	5856	1302	4183	820	35405
Specimen Containers Distributed.....						26653

BIOLOGICAL PRODUCTS DISTRIBUTED

Diphtheria Antitoxin	10,000 units	74 Packages
	5,000 units	17 Packages
Schick		3650 Tests
Toxoid		2430 C. C.
Toxin Antitoxin.....		249 C. C.
Typhoid Vaccine.....		3504 Treatments
Vaccine Virus		1880 Capillaries
Tetanus Antitoxin.....	1,500 units	3 Packages
Antirabic Virus.....		11 Packages

BUREAU OF VITAL STATISTICS

Stewart G. Thompson, D.P.H., Director

INFANT MORTALITY, 1933



There was a total of 1,619 deaths in Florida of babies under one year of age during the year 1933 as compared with a total of 1,680 for the previous year. All of the decrease was among the white babies. In 1933, there were 878 deaths among white babies under one year of age as compared with 940 for the previous year. There were 741 colored babies under one year of age who died last year as compared with 740 for the previous year. It will be noted, therefore, that the difference is among the white babies, there being one more death in 1933 among the colored than for the previous year.

While there was a notable decrease in the number of infant deaths, the infant mortality rate is two points higher for 1933 than for the previous year. This is due to the fact that there were only 25,681 births in 1933 as compared with a total of 27,411 for the previous year. The infant mortality rate is the number of deaths of infants under one year of age per 1,000 live births reported. The gradual decline of the birth rates in Florida is similar to the decline in the entire United States and, therefore, cannot be chargeable to inefficiency of registration. This question was of so much importance that a questionnaire was mailed from Washington to every state in the United States with a request for information concerning the completeness of registration, in order that an explanation might be obtained for the continuous decline of the birth rate in this country.

The problem of supervision of midwives in Florida has been studied for many years. Now, laws have been enacted, State Board of Health rules and regulations put into effect and many improvements realized in higher standards for midwives, more supervision and better results. Notwithstanding the fact that many radical changes have taken place through more strict requirements for midwives, it is very gratifying indeed to those responsible for the completeness of registration to find that the number of births among the colored population last year decreased less in proportion than those among the white population. There was a decrease of 1,254 births, or 6.6%, in 1933 as compared with 1932 for white population. The decrease in the number of births recorded for colored babies was 476, or 5.6%.

Since the decline in the birth rate has been experienced in most states, there seems to be no question in the minds of registration officials as to the actual decrease in the number of births occurring in the United States. Considering the United States as a whole, completeness of registration has reached an unusually high mark. At the same time, it is hoped that there will be higher standards of completeness reached in a few states which will slightly affect the records for the entire country.

BUREAU OF VITAL STATISTICS

Deaths of Infants Under One Year of Age and Rates per 1,000 Live Births By Color and By Counties—1933

Counties	TOTAL		WHITE		COLORED	
	Deaths Under 1 Yr.	Rates per 1000 Births	Deaths Under 1 Yr.	Rates per 1000 Births	Deaths Under 1 Yr.	Rates per 1000 Births
0. State	1619	63	878	50	741	92
1. Alachua	58	89	22	69	36	107
2. Baker	10	56	7	49	3	83
3. Bay	25	81	20	79	5	91
4. Bradford	12	59	8	50	4	93
5. Brevard	13	71	7	63	6	85
6. Broward	36	91	7	35	29	146
7. Calhoun	11	63	8	60	3	75
55. Charlotte	2	36	2	43	0	..
8. Citrus	5	52	2	35	3	77
9. Clay	3	38	3	53	0	..
62. Collier	0	..	0	..	0	..
10. Columbia	17	55	5	29	12	87
11. Dade	122	57	67	43	55	96
12. DeSoto	17	91	14	88	3	111
56. Dixie	6	66	3	46	3	115
13. Duval	148	55	75	41	73	83
14. Escambia	75	72	43	53	32	141
53. Flagler	1	36	0	..	1	77
15. Franklin	3	33	2	32	1	37
16. Gadsden	50	92	13	71	37	102
64. Gilchrist	6	67	6	79	0	..
57. Glades	3	77	2	61	1	167
65. Gulf	2	41	1	29	1	71
17. Hamilton	19	91	6	58	13	125
58. Hardee	15	70	12	62	3	150
63. Hendry	2	40	1	23	1	143
18. Hernando	5	56	1	18	4	118
59. Highlands	14	78	7	53	7	146
19. Hillsboro	134	56	97	49	37	86
20. Holmes	21	61	18	55	3	200
66. Indian River	6	42	2	22	4	77
21. Jackson	52	62	28	54	24	76

BUREAU OF VITAL STATISTICS

Deaths of Infants Under One Year of Age and Rates per 1,000 Live Births By Color and By Counties—1933 (Continued)

Counties	TOTAL		WHITE		COLORED	
	Deaths Under 1 Yr.	Rates per 1000 Births	Deaths Under 1 Yr.	Rates per 1000 Births	Deaths Under 1 Yr.	Rates per 1000 Births
22. Jefferson	28	81	7	74	21	83
23. Lafayette	6	74	6	78	0	
24. Lake	30	72	21	78	9	60
25. Lee	16	67	12	64	4	77
26. Leon	34	70	6	41	28	82
27. Levy	13	67	3	27	10	119
28. Liberty	8	96	4	75	4	133
29. Madison	29	78	9	54	20	97
30. Manatee	17	50	11	52	6	47
31. Marion	35	67	11	49	24	80
67. Martin	5	76	1	24	4	167
32. Monroe	17	87	11	73	6	133
33. Nassau	11	66	3	29	8	129
34. Okaloosa	13	55	13	59	0	
54. Okeechobee	4	63	2	39	2	154
35. Orange	52	64	35	59	17	80
36. Osceola	7	64	4	45	3	136
37. Palm Beach	59	80	25	53	34	131
38. Pasco	6	36	5	36	1	36
39. Pinellas	45	55	32	51	13	68
40. Polk	67	48	48	44	19	62
41. Putnam	23	71	9	50	14	97
42. St. Johns	18	56	7	34	11	95
43. St. Lucie	6	44	4	42	2	51
44. Santa Rosa	22	65	18	61	4	98
60. Sarasota	8	41	4	28	4	78
45. Seminole	33	103	11	75	22	126
46. Sumter	9	56	5	49	4	68
47. Suwannee	22	59	11	45	11	87
48. Taylor	10	61	5	41	5	119
61. Union	5	38	3	33	2	50
49. Volusia	43	64	25	53	18	91
50. Wakulla	3	44	3	67	0	
51. Walton	11	42	8	36	3	73
52. Washington	11	39	7	33	4	57

SNAPSHOTS OF A MAN ADDING YEARS TO HIS LIFE



HUMAN LIFE IS THE STATE'S GREATEST ASSET

FLORIDA



HEALTH NOTES

OFFICIAL MONTHLY BULLETIN

ESTABLISHED JULY, 1892

STATE BOARD OF HEALTH
JACKSONVILLE, FLORIDA

Entered as Second Class Matter, October 27, 1921
at the Postoffice at Jacksonville, Florida, Under the Act of August 24, 1912
This Bulletin will be sent to any address in the State free of charge.

Vol. 26

JUNE, 1934

No. 6

Edited by

STEWART G. THOMPSON, D. P. H., Member
American Medical Editors' and Authors' Assn.

ARTICLES

JOKE — *Hanson*

VACATION TIME — *Brink*

WATER SUPPLIES — *Lenert*

LET'S TRY THINKING — *Eaton*

NURSES' INSTITUTE, TAMPA — *Mettinger*

VENEREAL DISEASE MORBIDITY, BY STATES — *Thompson*

HENRY HANSON, M. D., STATE HEALTH OFFICER
Also Executive Officer and Secretary of Board

BOARD MEMBERSN. A. Baltzell, M. D., Pres.
MariannaHarry Dash Johnson, M. D.
Daytona BeachR. L. Hughes, M. D.
Bartow**STATE HEALTH OFFICER**

Also Executive Officer and Secretary of Board

Henry Hanson, M. D.

BUREAUS AT JACKSONVILLE**DIRECTORS**

Laboratories.....	Paul Eaton, M. D., D. P. H.
*Vital Statistics.....	Stewart G. Thompson, D. P. H.
Communicable Diseases.....	F. A. Brink, M. D.
Engineering.....	Louva G. Lenert
Public Health Nursing.....	Ruth E. Mettinger, R. N.
Accounting.....	G. Wilson Baltzell
Librarian.....	Elizabeth Bohnenberger

*Registration Inspector.....	Anna C. Emmons
Drug Store Inspector.....	M. H. Doss
Assistant Drug Store Inspector.....	Frank S. Castor

LABORATORIES

Jacksonville.....	Pearl Griffith, B. E.
Miami.....	E. R. Powell
Pensacola.....	Johnette McCormick
Tallahassee.....	Estelle Bryan
Tampa.....	H. D. Venters, B. S.

MEDICAL OFFICERS

DeFuniak Springs.....	C. W. McDonald, M. D.
Inverness.....	Leland H. Dame, M. D.
Jacksonville.....	W. A. Claxton, M. D.*
Tallahassee.....	H. A. McClure, M. D.
Tampa.....	C. W. Pease, M. D.

*(And Tuberculosis Clinician)

DISTRICT SANITARY OFFICERS

Milton.....	T. S. Kennedy, M. D.
Ocala.....	C. A. Holloway
Orlando.....	Russell Broughman
West Palm Beach.....	S. D. Macready
On "FERA" Duty.....	Fred A. Safay

PUBLIC HEALTH NURSES

Jacksonville.....	Joyce Ely, R. N. (Asst. Director)
Ft. Pierce.....	Annie Gabriel, R. N.
Jacksonville.....	Johanna L. Sogaard, R. N.
Marianna.....	Lalla Mary Goggans, R. N.
Tampa.....	Julia O. Graves, R. N.

MALARIA RESEARCH

Tallahassee.....	Mark F. Boyd, M. D. (Rockefeller Foundation)
------------------	---

MALARIA CONTROL STUDIES

Jacksonville.....	T. H. D. Griffiths, M. D. (U. S. Public Health Service)
-------------------	--

CONSULTANT IN ENTOMOLOGY

Orlando.....	W. V. King, Ph. D. (U. S. Bureau Entomology)
--------------	---

DIRECTORS FULL TIME COUNTY HEALTH UNITS

Tallahassee, Leon County.....	L. J. Graves, M. D.
Pensacola, Escambia County.....	W. A. McPhaul, M. D.

ADMINISTRATION

Henry Hanson, M.D., State Health Officer

JOKE

The joke appears in April Health Notes. I thought I had prepared a reasonably sound statement regarding the Florida child and its health, but as I close Eaton bursts forth with "Rats".

While I usually read all Health Notes articles before they go to press, I failed to do so for the April issue. When a person shouts "Rats" one usually wants to know why; consequently, I read Doctor Eaton's ratty remarks and found them characteristically fertile. If any one should compliment me by reading this article, and by chance he had failed to read the April Health Notes, I want to recommend that he start with Doctor Eaton's article and carefully read all that follows. Doctor Brink gives you very sound advice on communicable disease control. You find a summary of the important facts about nine leading diseases in the table reproduced on page 58.

Mr. Lenert's article on malaria control should be read by all who think malaria can be controlled by ditching. What he says is sound and is the result of years of study and practical experience. Indiscriminate drainage is more than waste of money—it is misleading people who do not have time or opportunity to follow work of this nature in all details.

Screening in rural communities is the only practical sound policy to follow in the effort to prevent infection with malaria. Malaria incidence is spotty; hence, mosquito-proofing and selective short radius drainage will give the most effective protection against malaria.

Doctor Thompson's summary of the mortality for 1933 is full of interesting data. He shows by these tables that while creditable achievements may be claimed, there is room for more work if we are to lower the maternal mortality, deaths from automobile accidents, venereal diseases, cancer, tuberculosis and many other preventable causes.

I hope you will read or re-read the articles referred to—they contain ample food for thought.

While I started in a jocose vein in regard to Doctor Eaton's article on "Rats", I do not want anyone to get the impression that the rat infestation to which he refers is not a serious problem. I have seen too much bubonic plague (black death) in South America and West Africa to underestimate the importance of the rat as a menace to the health and happiness of the human race. In one port, bubonic plague killed 2% of the entire population in a period of two months.

ADMINISTRATION

All Florida seaports should enact and rigidly enforce laws requiring "rat proof" construction for all new buildings. The old buildings should be made rat proof as rapidly as possible. It will cost a great deal more to do these things after plague has been introduced and the probabilities are great that plague will again visit Florida and the Gulf coast.

Warehouse keepers should apply to the State Board of Health for instructions in storing materials which may serve as food for rats. Proper warehouse "technique" is very important in rat control.

It takes a smart man to outsmart a rat.

BUREAU OF PUBLIC HEALTH NURSING

Ruth E. Mettinger, R.N., Director

F E R A NURSES' INSTITUTE AT TAMPA

So that the Federal Relief Nurses of Florida may have a better understanding of the Public Health Nursing Program under the supervision of the State Board of Health in which they are participating, institutes are being held at various points where they can conveniently come together for study and instructions.

One such institute was held at Tampa on May 7, 8 and 9, where fifteen counties of Southwest Florida were represented, and some sixty-five F E R A Nurses in Public Health were in attendance. The institute was ably arranged and carried out under the direction of Miss Julia O. Graves, District Nursing Supervisor of the State Board of Health. Other agencies cooperating were the Tampa Health Department, the Hillsborough County School Board, the District Nurses Association, the Family Service Association, the Nursing Division, Metropolitan Life Insurance Company, Surgical Supply Company, and Knight and Wall Company of Tampa. The Tampa Gas Company gave the use of its very convenient auditorium for the sessions.

Miss Graves called the Monday morning session to order, using a lysol bottle as an appropriate gavel, and introduced Dr. J. R. McEachern, Health Officer of Tampa, who welcomed the nurses to Tampa in the absence of Mayor R. E. L. Chancey.

Miss Graves read a paper on the "History and Development of the Public Health Nursing Movement," which gave a fine background for the details of organization, records and techniques considered during the institute. She then discussed the importance of exhibits and demonstrations in the program of the public health nurse. This discussion was effectively illustrated by the excellent arrangement of

BUREAU OF PUBLIC HEALTH NURSING

exhibits in the auditorium. These exhibits especially stressed the Maternity and Infancy Program and showed in detail simple methods and equipment for giving proper care during pregnancy and delivery, and for the health of the baby through his routine care, feeding and sleeping arrangements.

The Director of the Bureau of Public Health Nursing of the State Board of Health talked on the general principles of public health nursing and on organization of the nursing program. She stated that the objective of a successful program must be "to teach the family." She also gave practical and concrete information on the organization of a Public Health Nursing Committee, or Council; on the evaluation of a nursing visit, and discussed the value of classes in home hygiene and care of the sick.

Doctor F. A. Brink, Director, Bureau of Communicable Diseases, State Board of Health, spoke on the "School Communicable Disease Program." He emphasized the importance of up-to-date information for the nurse in methods of immunization and control, which will enable her to better secure the cooperation of the parents and community, and gave some valuable hints on the psychology of instruction of parents to secure effective isolation.

Doctor Henry Hanson, State Health Officer, spoke briefly on the responsibility of the Public Health Nurse in the Maternity and Infancy Program. He also stressed the part of the nurse in educating and supervising the 3,000 midwives practicing in the State.

On Tuesday, there were demonstrations of technique and informal discussion. Miss Thelma McCorkle, Metropolitan Life Insurance Company visiting nurse, gave a demonstration of the technique of a communicable disease visit; Miss Anna Grace Whipple, District Nursing Supervisor, F E R A, demonstrated a complete rural school inspection; Mrs. Lydia C. Holzscheiter, District Nursing Supervisor F E R A, demonstrated the use of records; and Mrs. Mary W. Matthews, District Nursing Supervisor F E R A, discussed the routine of a prenatal visit.

The last morning of the Institute, Miss Joyce Ely, Supervisor of Midwives, State Board of Health, gave a demonstration of the midwife bag at St. Pauls A. M. E. Church. Miss Ely followed her demonstration by a bag inspection for a group of midwives, so that the nurses saw the midwife bag in readiness for actual use.

These institutes are not restricted to F E R A Nurses, but the County Public Health Nurse and Chairmen of Health Committees are invited to attend. Dates can be secured by writing to the State Board of Health, Bureau of Public Health Nursing.

BUREAU OF COMMUNICABLE DISEASES**F. A. Brink, M.D., Director****VACATION TIME**

Whether the vacation lasts for a day or all summer, the wise vacationist will avoid certain causes of infection, injury and disease that may far outweigh the benefits and pleasures of the change of environment and activity.

Typhoid fever is sometimes contracted by drinking water, the purity of which is taken for granted because of its clear, sparkling appearance. No person can recognize the presence of disease producing bacteria in water by its appearance. Boil the drinking water if it has come from any questionable source, such as a river, spring or shallow well. Farmhouse milk may be fresh and rich but typhoid germs may get into it from a careless handler who has had typhoid. Bring it to a boil or heat to 145 degrees F. for a half hour. That will render it safe and not harm its food value or taste. The water in which we swim should be pure enough to drink. Avoid bathing in sewage-polluted streams. Persons who have not had at least two courses of typhoid inoculations will do well to take the "shots" before vacation time. This is one way the medical department has of keeping typhoid out of the army and the training camps.

Hookworm disease is common in unsewered areas of the South. City children are usually free of it, but if they visit their country cousins and go barefoot on soil polluted with human discharges they may get a severe infestation and be almost as sallow — almost as anemic as some of the country boys and girls. The open back privy is an abomination and a curse.

Creeping Eruption is caused by the immature form of another hookworm, one commonly found in cats and dogs. This very aggravating skin disease is acquired by contact with wet soil or water contaminated with the excrement of these animals. One should avoid going barefoot on wet ground and wading in muddy pools after a rain. Even sitting or lying on the ground may result in serious infestation because these baby worms can pass through wet garments. A thorough bath and change of clothing, after contact with the soil, will help even after one feels the stinging sensation caused by the worms penetrating the skin.

Sunburn is a frequent cause of great suffering and disability. It can and should be avoided. Leaders at school and Sunday School picnics and all sorts of outings should caution the members of the party against undue exposing to the sun of any portion of skin not customarily exposed. Fifteen or twenty minutes between 10:00 a. m. and 4:00 p. m. may produce slight redness. An hour or two is almost certain to result in severe burning. Before 10:00 a. m. and after 4:00

BUREAU OF COMMUNICABLE DISEASES

p. m. there is little danger. If possible the party should arrive at the bathing place at about 4:00 p. m. and have the evening meal after the swim. Creams and oils cannot be depended on for protection.

Drowning usually results from taking chances, doing stunts, going out too far and occasionally from cramps. Life saving equipment of some sort should always be at hand. A rope, a life preserver, a first class swimmer skilled in rescue work, a boat—any or all of these will diminish the danger of death from drowning. The Schafer method of resuscitation should be known to at least one member of every outing party. There were 144 deaths caused by drowning in Florida last year.

Poison Ivy is another cause of great distress to many vacationists. Everyone going to the woods and fields should learn to recognize and take care to avoid contact with the plant. It is often confused with the Virginia Creeper, which it resembles somewhat and which is often called 5-leaved ivy, while the poison variety has but three lobes to each leaf. It is unlikely that anyone is poisoned except by contact with the plant or its poisonous resin, but the sap, deposited on tool handles, may produce poisoning. Prompt removal of the resin by repeated washings and rinsings will prevent harm. A strong alkaline soap may be used.

BLOOD PRESSURE

Everyone has blood pressure and it is only when the blood pressure gets too high or too low that there is occasion for alarm and need for seeking medical advice. Of course, the blood pressure varies considerably within maximum and minimum limits which are considered normal. Abnormal variations depend on so many factors that every case should have individual consideration by a competent physician.

Particular attention is being directed to blood pressure variations above normal; hence, this brief discussion. Prominent among the reputed causes of high blood pressure are: strenuous living; constriction of the blood vessels from some unknown cause; arteriosclerosis (hardening of the arteries); obesity; high protein diet; use of too much salt; kidney disease; abnormal functioning of certain glands, particularly the thyroid and adrenals; certain drugs. Such a variety of ascribed causes and the occurrence of high blood pressure in many persons presenting no apparent cause would indicate that there is yet much to be learned about it. So far as possible and regardless of blood pressure, the excesses of life, injurious amounts and varieties of foods or drugs, may well be avoided. The advice of a physician should be sought often in order that danger signals may be recognized early and timely corrections made.

BUREAU OF COMMUNICABLE DISEASES

Many unsuspected cases are discovered by accident, so to speak, in the course of a routine examination. Symptoms that should cause one to seek medical aid are headache, dizziness, insomnia, palpitation, indigestion and weariness or difficult breathing after moderate exertion.

Whether or not a definite cause for high blood pressure can be found in any individual patient, benefit may be expected in most cases from suitable adjustments in diet, mode of living, etc. These adjustments can best be made under the supervision of a competent medical doctor.

BUREAU OF LABORATORIES

Paul Eaton, M.D., D.P.H., Director

LET'S TRY THINKING

One of the classic stories in medical research is that a famous physician when consulted by a younger man said, "Don't think; try." In spite of the good results commonly attributed to the fact that the student followed this advice, there is reason to believe that a little thinking now and then does no harm.

Let us imagine a city of the size of New York in which opportunities for personal contact are perfectly random. That is, each person is as likely to meet any one of his fellow city-dwellers, as any other one (this is of course, a highly improbable case). Let us further imagine a disease transmitted by personal contact such as hand shaking, having a period of incubation of one day and lasting one day. Let this disease be introduced by a visitor who shakes hands with ten citizens, each of whom contracts the disease and on the next day shakes hands with ten persons, and so on.

1st day	1 case	5th day	10,000 cases
2nd "	10 cases	6th "	100,000 "
3rd "	100 "	7th "	1,000,000 "
4th "	1,000 "	8th "	10,000,000 "

Theoretically, then, it would be possible for this imaginary disease to affect everybody in the city in less than eight days.

Now let us suppose that some Public Health agency has devised and applied to every inhabitant of this city an immunizing treatment which protects nine out of ten against the imaginary disease.

BUREAU OF LABORATORIES

Figuring on the same basis as before; that is, ten contacts per day per person, we have the following result:

1st day, 1 case; 2nd day, 1 case; 3rd day, 1 case; etc.

Now it sounds ridiculous on the face of it to say that a procedure only 90% effective can afford practically 100% protection, but it is a fact nevertheless, and it is just this which gives us the good result we get from the far-from-complete vaccination against smallpox.

Just for curiosity, let us see what would happen if the immunization were 50% effective.

1st day	1 case	6th day	3,125 cases
2nd "	5 cases	7th "	15,625 "
3rd "	25 "	8th "	78,125 "
4th "	125 "	9th "	390,625 "
5th "	625 "	10th "	1,953,125 "
		11th "	9,765,625 "

It will be seen that between no protection at all and 50% protection, there is very little difference, but if the efficiency of the prophylaxis be increased from 50% to 90% there is a great difference in the outcome.

SUMMARY OF WORK DONE IN THE LABORATORIES OF THE STATE BOARD OF HEALTH DURING THE MONTH OF APRIL, 1934

	Jacksonville	Tampa	Pensacola	Miami	Tallahassee	Total
Animal Parasites . . .	7169	1625	511	254	115	9674
Diphtheria	645	445	47	525	60	1722
Typhoid	889	219	27	197	27	1359
Malaria	1990	236	52	51	229	2558
Rabies	10	1	..	2	..	13
Tuberculosis	356	158	37	64	18	633
Gonorrhea	794	334	63	138	77	1406
Kahn	5864	2324	378	1583	343	10492
Water		32	..	186	..	218
Milk	333	377	67	569	75	1421
Miscellaneous	357	33	71	299	3	763
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
	18407	5784	1253	3868	947	30259

Specimen Containers distributed 7863

BUREAU OF LABORATORIES**BIOLOGICAL PRODUCTS DISTRIBUTED**

Diphtheria Antitoxin.....	10,000 units	29 Packages
Schick.....		5360 Tests
Toxoid.....		3055 C. C.
Typhoid Vaccine.....		4316 Treatments
Vaccine Virus.....		2771 Capillaries
Tetanus Antitoxin.....	1,500 units	6 Packages
Antirabic Virus.....		14 Packages

ALL REQUESTS FOR BIOLOGICAL PRODUCTS SHOULD
BE DIRECTED TO THE STATE LABORATORY
STATE BOARD OF HEALTH
JACKSONVILLE, FLORIDA

BUREAU OF ENGINEERING

Louva G. Lenert, Director

WATER SUPPLIES

The drinking of water from polluted wells is the cause of many cases of typhoid fever and dysentery.

The water may look good, taste good and smell good and still be highly contaminated. Laboratory tests may be necessary to prove the sanitary quality of a water supply, but there are many instances in which a mere inspection of the well and surroundings would condemn a supply for drinking water.

Not only must a supply be safe today, but there must be no probability of contamination in the future. Water supplies may seem to be entirely satisfactory for many years and yet be subject to serious pollution. The users may have become immune to its use or, if sewage contaminated, this pollution may have been from well persons, or pollution may have been caused from drainage from manure and other animal contamination that would not cause typhoid fever, but may lower bodily resistance to disease.

Laboratory Tests

Laboratory tests of water supplies in Florida are made free of charge, but samples for analysis must be submitted in sterile bottles furnished by the laboratory and the sender must pay the charges on the shipment to the laboratory.

When bacteriological analysis of a water supply is desired a request addressed to the Bureau of Engineering, State Board of Health,

BUREAU OF ENGINEERING

should be made for the necessary sterile bottles. In submitting samples it is absolutely necessary that all of the information requested on the sheet accompanying each sterile container be given in full so that intelligent consideration may be given in passing on the supply.

Location of Wells and Springs

The level of ground water supplying our wells and springs follows approximately the slope of the ground or the direction of major streams, so that it is desirable to locate these supplies on higher ground than nearby possible sources of pollution.

Cesspools are always dangerous sources of pollution and are looked on with much disfavor in any location. Earth pit privies which penetrate ground water, sewers and stables are other common sources of pollution. Septic tank drains may also pollute water supplies located nearby.

Springs may be very easily contaminated by the location of polluting factors in the area above its source, such as the hillside above its outcropping.

Driven Wells

Driven wells are very common in many sections of Florida where water is found within a distance of 50 to 75 feet and where little rock or other obstacles to driving are found.

As a rule, good water is encountered 16 to 50 feet below the ground surface. To use a suction force-pump on top of driven well it is essential that the water in the well stands not more than 20 feet below base of pump. Where water is at a greater depth, a 3-inch pipe and point should be driven; and a force pump, with pump cylinder lowered to below the lowest water level in 3-inch pipe, should be used. The top of 3-inch casing should be sealed. Water of driven wells, since it is usually found in sands or gravels, is less likely to be subjected to polluting influences. There is little chance of surface water entering the well if proper care is exercised to see that pipe joints are made up solid and the top of well is provided with concrete pump base.

Most driven wells in Florida consist of $1\frac{1}{4}$ " galvanized pipe, fitted with a special brass jacket drive point of suitable mesh (60 gauge).

The pipe is secured in 5-foot lengths which are fastened together with sleeve couplings. The point is screwed on one end and a malleable iron drive cap on the top and the well is driven with a maul, sledge or "pile driver." From time to time as the driving proceeds the driving cap is removed and additional joints added for greater

BUREAU OF ENGINEERING

depth. Experience in driving permits one to gain a fair idea of water-bearing strata when encountered.

Troubles with driven wells are usually experienced when the strainers become stopped or when the threaded joints become loosened through vibration.

(To be continued in next issue)

INCREASE IN CANCER MORTALITY MAY NOT BE REAL.

More Cancer Recognized Today Than Before

Cancer now ranks second as a cause of death, having recently passed tuberculosis and pneumonia. Whether this increase is real or only apparent is a question of speculation today, but much observation indicates that the increase is due to the fact that more cancer is recognized today than ever before, according to Dr. Harry C. Saltzstein, who writes on "Cancer—Its Status Today" for the March *Hygeia*. Another factor is the increase in the proportionate size of the older age group, arising chiefly from better control of diseases that kill early in life, for cancer is known as a disease of later life.

In his article, Dr. Saltzstein answers some pertinent questions on cancer:

Is Cancer Contagious?

Today practically no authority believes that cancer is due to any micro-organism that one person may "catch" from another. The fact that thousands of nurses and doctors have not contracted the disease from their cancer patients proves that contagion is not to be feared.

What Causes Cancer?

To the best of present-day knowledge, cancer usually starts in body regions that have been mildly irritated for a long time. The process of healing and irritating must continue for a long time before cancer develops, but why the process develops into cancer is unknown.

Does Cancer Run in Families?

Some investigators have proved that cancer is hereditary in mice, but the probability is that there is only a hereditary tendency in man.

Does Cancer Occur More Often In Later Life Than In the Young Adult?

Cancer is a disease of later life, first, because the aging tissues do not repair themselves as well; second, because the irritation that pro-

duces cancer must act over a long duration of time before the cancerous stage is reached.

Could Any Growth If Not Given Attention Develop Into Cancer?

Not all growths develop into cancer; some are so-called benign tumors. The most important precursor of cancer is a chronic irritated spot which will not heal, a sore on the lip or tongue, or a chronic scaly patch on the face of an elderly person.

Is Cancer Curable?

As a rule the physician does not see many cancers in the early, local, curable stages. Records show that from 60 to 70 per cent of breast cancers can be cured, from 80 to 90 per cent of lip cancers, and from 40 to 50 per cent in cancer of the mouth of the womb, all on condition that they are taken early.

ADVANTAGES OF MEMBERSHIP IN THE AMERICAN PUBLIC HEALTH ASSOCIATION

Every person engaged in public health activity should join the American Public Health Association—the organized professional society of public health workers of the United States, Canada, Cuba and Mexico. For over sixty years the association has been serving public health workers continuously, accumulating public health knowledge and making it available to sanitarians that they might apply the newer public health procedures to their own problems.

The advantages of affiliation are manifold. Members receive each month the *American Journal of Public Health* which covers every branch of public health and preventive medicine. This magazine should be an essential part of the working equipment of every man and woman engaged in public health practice.

The Association year book contains over 200 pages of technical committee reports, pertinent information relating to the Association and also to the fifteen affiliated societies and two branches.

The book service publishes annually and distributes free to members a bibliography on public health and allied subjects covering more than a thousand technical and educational volumes on health subjects. Any book of any publisher may be ordered through the book service. Members receive a 10 per cent discount on Association publications.

Through the ten sections and sixty-odd technical committees, the information service is prepared to answer authoritatively any question on any public health topic.

Application blanks for membership may be obtained by writing to the State Board of Health, Jacksonville.

BUREAU OF VITAL STATISTICS

Stewart G. Thompson, D.P.H., Director

VENEREAL DISEASE MORBIDITY, BY STATES



A letter dated June 12, 1934, was received from H. S. Cumming, Surgeon General, United States Public Health Service, which stated: "Your attention is invited to the accompanying morbidity report of the venereal diseases for the month of April, 1934. This statement is prepared monthly by the Public Health Service and, because of the widespread prevalence of the venereal diseases, is of much importance to physicians and other individuals interested in the prevention and eradication of syphilis and gonorrhea. * * *

"It is hoped that by releasing this statement the Public Health Service may assist the State and local boards of health in interesting the individual physicians of the United States in the more thorough reporting of the venereal diseases. The present trend is to neglect the submission of such morbidity reports, yet the extensiveness of venereal disease prevalence can never be ascertained without the thorough cooperation and assistance of all of the physicians of the country. * * *"

TREASURY DEPARTMENT

PUBLIC HEALTH SERVICE

HEALTH OFFICERS' MONTHLY STATEMENT OF
VENEREAL DISEASES REPORTED
APRIL, 1934

This statement is issued monthly for the information of health officers in order to furnish current data as to the prevalence of the venereal diseases. The following reports were received from State Health Officers. The figures are preliminary and subject to correction. It is hoped that this will stimulate more complete reporting of these diseases.

STATE	SYPHILIS		GONORRHEA	
	Cases Reported During Month	Monthly Case Rates per 10,000 Population	Cases Reported During Month	Monthly Case Rates per 10,000 Population
Alabama.....	320	1.19	85	0.32
Arizona.....	22	.49	131	2.89
Arkansas.....	537	2.87	221	1.18
California (b).....	.....	.....	.....	.....
Colorado (a).....	.....	.....	.....	.....
Connecticut (c).....	224	1.36	96	.58
Delaware.....	90	3.73	52	2.16
District of Columbia.....	148	2.99	89	1.80
Florida.....	302	1.94	50	.32
Georgia.....	563	1.93	337	1.16
Idaho.....	0	....	0	....

BUREAU OF VITAL STATISTICS

HEALTH OFFICERS' MONTHLY STATEMENT OF
VENEREAL DISEASES REPORTED
APRIL, 1934—(Continued)

STATE	SYPHILIS		GONORRHEA	
	Cases Reported During Month	Monthly Case Rates per 10,000 Population	Cases Reported During Month	Monthly Case Rates per 10,000 Population
Illinois.....	1894	2.42	1293	1.65
Indiana.....	146	.44	130	.40
Iowa (c).....	117	.47	131	.53
Kansas.....	129	.68	63	.33
Kentucky.....	192	.73	303	1.14
Louisiana.....	209	.97	136	.63
Maine.....	42	.52	49	.61
Maryland.....	663	3.99	263	1.58
Massachusetts.....	389	.90	431	1.00
Michigan.....	483	.96	344	.68
Minnesota.....	379	1.46	304	1.17
Mississippi.....	1056	5.16	1501	7.33
Missouri.....	623	1.70	300	.82
Montana (c).....	52	.97	13	.24
Nebraska.....	43	.31	57	.41
Nevada (a).....	.....	.....	.....	.....
New Hampshire.....	14	.30	14	.30
New Jersey.....	691	1.65	219	.52
New Mexico.....	76	1.75	25	.58
New York.....	4855	3.74	1139	.88
North Carolina.....	987	3.01	280	.85
North Dakota.....	27	.39	40	.58
Ohio (c).....	599	.88	229	.34
Oklahoma (c).....	134	.64	101	.48
Oregon.....	19	.19	59	.60
Pennsylvania (b).....	.....	.....	.....	.....
Rhode Island.....	45	.64	47	.67
South Carolina (c).....	403	2.31	502	2.87
South Dakota.....	2	.03	17	.24
Tennessee.....	1180	4.43	431	1.62
Texas.....	153	.25	27	.04
Utah (a).....	.....	.....	.....	.....
Vermont.....	19	.53	18	.50
Virginia.....	357	1.46	233	.95
Washington.....	160	1.00	194	1.21
West Virginia (b).....	.....	.....	.....	.....
Wisconsin (d).....	33	.11	157	.52
Wyoming (a).....	.....	.....	.....	.....
TOTAL.....	18,377	1.74	10,111	0.96

(a) Not reporting.

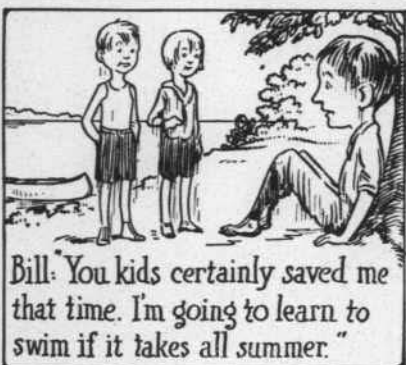
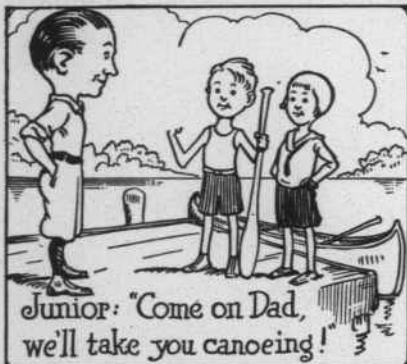
(b) Have been reporting regularly but no report received for current month.

(c) Incomplete.

(d) Only cases of syphilis in the infectious stage are reported.

Surveys in which all medical sources have been contacted in representative communities throughout the United States have revealed that the monthly rate per 10,000 population is 6.6 for syphilis and 10.2 for gonorrhea.

BILL JONES' NARROW ESCAPE



HUMAN LIFE IS THE STATE'S GREATEST ASSET

FLORIDA



HEALTH NOTES

OFFICIAL MONTHLY BULLETIN

ESTABLISHED JULY, 1892

STATE BOARD OF HEALTH
JACKSONVILLE, FLORIDA

Entered as Second Class Matter, October 27, 1921
at the Postoffice at Jacksonville, Florida, Under the Act of August 24, 1912
This Bulletin will be sent to any address in the State free of charge.

Vol. 26

JULY, 1934

No. 7

Edited by

STEWART G. THOMPSON, D. P. H., Member
American Medical Editors' and Authors' Assn.

ARTICLES

WATER SUPPLIES—*Lenert*

PARENT EDUCATION—*Mettinger*

QUADRATIC EQUATIONS—*Eaton*

FOR LOVE OR MONEY—*Brink*

AUTOMOBILE ACCIDENT DEATHS 1933—*Thompson*

BOARD OF HEALTH AND DAIRY INDUSTRY—*Hanson*

HENRY HANSON, M. D., STATE HEALTH OFFICER
Also Executive Officer and Secretary of Board

BOARD MEMBERSN. A. Baltzell, M. D., Pres.
MariannaHarry Dash Johnson, M. D.
Daytona BeachR. L. Hughes, M. D.
Bartow**STATE HEALTH OFFICER**

Also Executive Officer and Secretary of Board

Henry Hanson, M. D.

BUREAUS AT JACKSONVILLE**DIRECTORS**

Laboratories.....	Paul Eaton, M. D., D. P. H.
*Vital Statistics.....	Stewart G. Thompson, D. P. H.
Communicable Diseases.....	F. A. Brink, M. D.
Engineering.....	Louva G. Lenert
Public Health Nursing.....	Ruth E. Mettinger, R. N.
Accounting.....	G. Wilson Baltzell
Librarian.....	Elizabeth Bohnenberger

*Registration Inspector.....	Anna C. Emmons
Drug Store Inspector.....	M. H. Doss
Assistant Drug Store Inspector.....	Frank S. Castor

LABORATORIES

Jacksonville.....	Pearl Griffith, B. E.
Miami.....	E. R. Powell
Pensacola.....	Johrette McCormick
Tallahassee.....	Estelle Bryan
Tampa.....	H. D. Venters, B. S.

MEDICAL OFFICERS

DeFuniak Springs.....	C. W. McDonald, M. D.
Inverness.....	Leland H. Dame, M. D.
Jacksonville.....	W. A. Claxton, M. D.*
Tallahassee.....	H. A. McClure, M. D.
Tampa.....	C. W. Pease, M. D.

*(And Tuberculosis Clinician)

DISTRICT SANITARY OFFICERS

Milton.....	T. S. Kennedy, M. D.
Ocala.....	C. A. Holloway
Orlando.....	Russell Broughman
West Palm Beach.....	S. D. Macready
On "FERA" Duty.....	Fred A. Safay

PUBLIC HEALTH NURSES

Jacksonville.....	Joyce Ely, R. N. (Asst. Director)
Ft. Pierce.....	Annie Gabriel, R. N.
Jacksonville.....	Johanna L. Sogaard, R. N.
Marianna.....	Lalla Mary Goggans, R. N.
Tampa.....	Julia O. Graves, R. N.

MALARIA RESEARCH

Tallahassee.....	Mark F. Boyd, M. D. (Rockefeller Foundation)
------------------	---

MALARIA CONTROL STUDIES

Jacksonville.....	T. H. D. Griffiths, M. D. (U. S. Public Health Service)
-------------------	--

CONSULTANT IN ENTOMOLOGY

Orlando.....	W. V. King, Ph. D. (U. S. Bureau Entomology)
--------------	---

DIRECTORS FULL TIME COUNTY HEALTH UNITS

Tallahassee, Leon County.....	L. J. Graves, M. D.
Pensacola, Escambia County.....	W. A. McPhaul, M. D.

ADMINISTRATION

Henry Hanson, M.D., State Health Officer

THE STATE BOARD OF HEALTH AND THE
DAIRY INDUSTRY*

In discussing the State Board of Health and the dairy industry, my recollections go back to incidents which occurred 24 years ago,—to the time when Dr. Charles E. Terry, the City Health Officer of Jacksonville, began a study of the sanitary quality of milk sold by local dairymen. I was then the Director of the State Board of Health Laboratories, with headquarters in Jacksonville. Up to the close of the year 1909, there had been only the one laboratory, although plans had been made by Dr. Porter, the State Health Officer, to establish branch laboratories in Tampa and Pensacola. Early in the year, the Tampa Laboratory was established and about July 1, a second branch laboratory was placed in operation in Pensacola.

Dairy sanitation throughout the state had been given very scant attention, as is illustrated by the condition of 12 samples of milk brought to me by Dr. Terry. According to my recollection, the lowest bacterial count on any of the 12 samples was more than one million, while the highest showed a count of 148 million bacteria per cubic centimeter. When pressure was placed on some of the dairymen to clean up their dairies and deliver milk with lower bacterial counts, some of them resorted to chemicals to assist in holding down the bacterial counts. Chemicals might have helped had it not been for the fact that some patrons became ill after drinking the milk, which again called for laboratory investigations and revealed the fact that such milk had been heavily dosed with formaldehyde. One sample of milk stood on our laboratory shelves for more than three months without clabbering. Naturally, what has been said of past conditions is a great contrast to the present status of dairy sanitation.

In so far as the State Board of Health's responsibility is concerned, the possibility of living up to that responsibility may best be pictured by quoting a paragraph from a letter of our Chief Sanitary Engineer to one of the dairymen in the state:

"The Constitution of the State charges the State Board of Health with supervision of all matters relating to public health. It is manifestly impossible to maintain a State inspection service adequate to cover all conditions which may arise. The Legislature appropriates a sum for the operation of the State Board of Health and the Board arranges the budget to meet the amount available. It is under this budget that the Engineering Bureau was assigned five sanitary officers for the entire State of Florida to care for inspections and

*An extract from an address given before the Florida Dairy Products Association, June 21, 1934.

ADMINISTRATION

supervisions in connection with water supplies, sewerage and sewage disposal, garbage disposal, swimming pools, tourist camps, canneries, drainage wells, mosquito and malaria control, pest mosquito control, sanitary privy construction, school sanitation, oyster sanitation surveys, oyster shucking plants, bottled water plants, and innumerable other duties besides the inspection of dairies. Each sanitary officer operates in a designated area covering ten to eighteen counties."

If the State Board of Health had adequate personnel, it would be able to accomplish results in dairy sanitation similar to what we are apparently getting now in our efforts to control the maternal mortality. In our Engineering Bureau we have only six men. Up to the time the F E R A placed the relief nurses under the direction of the State Board of Health, we had only six nurses. The entire nursing program has been under the jurisdiction and exclusive direction of the State Board of Health. It seems that the work done with the midwives, home visits, etc., together with an aroused interest among the medical profession has lowered our maternal mortality by over 30 per cent for the first four months of the year. Similar results could be achieved in dairy sanitation and it would be only a matter of a comparatively short time before the small dairy problem would disappear as a bone of contention. The one-cow dairy is scarcely worthy of comment even though such place themselves in the category of dairies if the milk is delivered. If the neighbor, however, calls for the milk, he relieves the producer of responsibility so long as no sickness results from consumption of the milk so obtained.

All Boards of Health regard milk or dairy sanitation as a function of the Health Department. The personnel required for inspection is determined by the industry subject to inspection, hence the ultimate cost to the public will be the same whether it is done by the Health Department or some other branch of the State Government.

By virtue of the State Milk Law enacted in 1929 and modified in 1931, there appears to be a divided authority in the sanitary supervision of dairies. I do not, however, find that there is any paragraph or chapter which covers division of responsibility for unfavorable results or for outbreaks of sickness in the state. The State Board of Health is still the organization which will be criticized and called upon to determine the reason for epidemic outbreaks regardless of whether or not it was consulted in the establishment of the sanitary regulations. A reasonable allotment of sanitary officers to the State Board of Health would enable it to quite effectively handle the sanitary phase of the dairy industry. This would allow the Department of Agriculture to carry on some of the excellent work reported by Mr. Mayo, such as the demonstration of what can be done in the development of pastures, which automatically would reduce the feed

ADMINISTRATION

costs. Although I am not a dairyman, I cannot help feeling that by proper farming a very large percentage of the feed needed for dairy herds could be raised either by the dairymen themselves or by other farmers living in Florida. If this were done, dairymen should cease to be mortgaged to the feed men who import practically all their feed from outside of the state.

Much has been said in regard to regulations and equipment. These are of little value unless regulations are followed and equipment is kept in condition to give the results for which it was devised. Cleanliness is the one and all important factor in dairy sanitation as it is in disease transmission in general. Some of the milk-borne diseases, or rather diseases which may be transmitted by unclean milk, are tuberculosis, typhoid fever, Malta fever, septic sore throat, scarlet fever, diarrhea and enteritis. A comparison of the infant mortality rate for Jacksonville city in 1911, which was 167 per 1,000 live births, with that of 1933, which was 55, is a graphic illustration of the contribution to better health resulting from greater cleanliness in the handling of milk. The responsibility for dairy sanitation should be definitely determined, thereby removing the misunderstanding which prevails at the present time.

The Standard Ordinance promulgated by the United States Public Health Service and approved by the Bureau of Dairy Industry of the United States Department of Agriculture has been adopted by the State Board of Health as the model ordinance of the Board. It provides a standard by which one may know whether he is obtaining a grade of milk in Florida which is comparable with similar grades obtained elsewhere. It is an ordinance which fully safeguards the health of the people. It provides for three grades of milk, all of which are safe for human consumption, and offers the dairyman a fair opportunity for compliance. It is impossible to maintain one single standard grade over the entire state. If that is attempted you will have several actual grades of milk sold under the standard of one grade. It is unnecessary to attempt the establishment of super-ordinances by which certain localities lay claim to having milk superior to all others. The compliance with such ordinances means unnecessary additional cost of the milk, which the consumer must bear. Ordinances of alleged superior standards are not justifiable and are frequently misleading. Even here, the general public health principles of the cost of control measures as compared with the cost of preventable sickness must be taken into consideration.

At the present time, the Standard Ordinance is receiving further study by the milk inspection bureau of the Public Health Service, the milk experts of the Bureau of Dairy Industry of the United States Department of Agriculture and leading milk experts in various states. The standards promulgated by this group are fair to both consumer and producer.

BUREAU OF ENGINEERING**Louva G. Lenert, Director****WATER SUPPLIES—(Continued)****Drilled Wells**

Most drilled wells are of the double tubular type, so described because there is an iron casing which extends to solid rock or into compact soil and inside the casing a drop-pipe extends down to the lowest level.

In Florida drilled wells nearly always penetrate some limestone formations and there is little difficulty in obtaining water because of the many caverns and fissures, but this water is often of questionable quality.

In all limestone areas there are numerous sinkholes, and it is through these that water enters the underground channels. There is practically no purification by natural filtration because the water flows as freely through the channels in the rock as it would in pipe.

Because a well in limestone is usually 200 to 300 feet or more in depth it is often thought that the water should be of good quality because of the depth. Unless the casing in such wells is properly placed, water from the surface may enter the supply. For sanitary purposes a deep well is no deeper than the depth of the casing. This is sometimes seated at the first rock encountered and pollution may enter below this depth through fissures and cracks.

The owner should insist that a still drive shoe be used and driven firmly into the rock or solid formation. If not more than 50 to 60 feet of casing will be required, the hole drilled to this depth should be one size larger than the casing. After the casing is firmly seated by means of the drive shoe, watch for any leakage into the well. If the water is at a lower depth, pour water into the space outside of the casing until filled and then, during the next 24 hours, watch for leakage into the well.

Before completing the well, the annular space outside of the casing should be filled with Portland cement grout or a rich mortar all the way to the ground surface.

In some instances a lead pocket or an expanding rubber pocket will be required, but when these seals are resorted to, conditions will usually call for double casing.

BUREAU OF ENGINEERING

A log of the drill hole showing diameter of the hole in different sections, the character, thickness and depth of each soil rock formation and kind of material, the depth of ground water table and at what depths any openings are found, should be carefully kept by the driller and furnished to the owner on completion of the well.

Springs

A spring is considered to be an issue of water from a porous stratum of soil underlying an impervious stratum, and should not be confused with surface seepage which usually accompanies the outcropping of the first impervious layer of soil or rock.

Spring water away from surrounding sources of pollution is usually well filtered in its passage through the ground, though in certain rock formations the spring water travels through fissures and crevices in the rock and may be subject to pollution.

Springs are frequently open to contamination from surface wash and from animals. Either the spring may be open so that animals may have access to the water, or animals may be pastured in the vicinity and pollute the surroundings. Springs may be subject to flooding at times of high water with polluted water from streams. Dipping of unclean hands and containers into the spring is another source of contamination.

The best method of protection of a spring is usually to build a concrete housing over and around it. Concrete side walls should be built deep enough to cut off all entry of surface drainage from above the spring level. A concrete cover should be provided and an overflow pipe inserted to bring the water out for use. If the contour of the ground is such that the water in the spring will not rise to a sufficient height to flow out through the overflow pipe, it may be necessary to install a pump. This should be installed with the same precautions as are exercised in dug well protection. Dipping from a spring is undesirable.

Springs on the banks of streams may furnish satisfactory water except at times of high water in the stream. If subject to such pollution they should be disinfected each time they are overflowed before being put into use again.

Springs on hillsides should be protected from surface wash by diking or ditching the surface drainage around the spring. Cattle should be kept away from the spring by fencing.

BUREAU OF COMMUNICABLE DISEASES**F. A. Brink, M.D., Director****FOR LOVE OR MONEY**

Those rumblings we hear as we go about over the state are not due to sun spots, nor to our efforts at collecting war loans. They are the ever increasing demands for a tuberculosis sanatorium. They are coming from an increasing number of sources—from sections where previously the people seemed indifferent. Mingled with the sound can be heard the pleadings of thousands of patients calling for a chance to get well—to be helped only until they are again able to take up the useful duties of citizenship; wives, husbands, mothers, fathers weeping for the needed care they cannot offer their loved ones; children newly infected and scarcely started on the down grade, crying for a chance to grow up strong and vigorous for the joys and duties that lie before them.

For some unguessed reason the clubs and associations have renewed their interest in the fulfillment of the implied promise of the 1927 Legislature when it passed the tuberculosis sanatorium law and provided in two ways for the necessary funds to pay the cost, (1) from State Board of Health funds "now provided by law" and, (2) an outright appropriation of \$200,000. Was this a mere gesture or only a jest? The laughs it has provoked have been lacking in mirth.

It seems unbelievable that anyone, knowing of the stupendous need for and the colossal good to result from proper institutional care of consumptives, would pause for one moment in the battle for a sanatorium.

If anyone thinks Florida is impoverished, let him look about. Huge private and public expenditures are being made. The cost of a sanatorium would be trivial beside that of other projects of which we have come to speak casually. We spend lavishly for the object of our love. Let us love a little less for a time our creature comforts, pleasures, luxuries and a little more the cause of the needy.

Shall we borrow the money from Uncle Sam? That would be worth while. Shall we beg it from our own or from Northern multi-millionaires? No more worthy monument than a sanatorium could be built for a captain of industry or a wizard of finance. Shall we impose a sales tax, luxury tax, nuisance or ad valorem tax? Less worthy enterprises than this have been so financed. Where there's a will there's a way. Will we? WE WILL.

Educational Value

There is no better place than a sanatorium for a consumptive to learn and put into practice the rather simple technique necessary to avoid being a menace to his associates. Here his companions are

BUREAU OF COMMUNICABLE DISEASES

careful; simple facilities for sputum disposal are at hand, he is given instructions by doctors and nurses and he acquires the habits which govern his conduct when he returns home. Some consumptives actually seem to prefer having others fall victim and share their misery. Residence in the sanatorium often cures them of carelessness due to this attitude or to indifference. Likewise, they learn and put into practice correct habits of living—diet, rest, etc.

Protection

Early hospitalization removes the patient from the home and puts an end to the danger that he will transmit the disease to other members of the family. This affords immediate protection and, what is an extremely important factor in preserving the general health of those left at home, it removes the burden of caring for a patient during a long period of illness. Such care places a great nervous and physical strain on the others. Unless the family is very well-to-do, the diminished income and the increased cost of caring for the patient soon bring about a state of poverty that is practically hopeless. Even when aid is given by the county or charitable organizations, the patient usually dies and some of the contacts are very likely to succumb later in life.

We firmly believe that a tuberculosis sanatorium would lower the death rate, be a sound economic project, raise the standing of the state as to health protection and justify the claim that Florida is a splendid year 'round tourist state.

VENEREAL DISEASE TREATMENT

In the control of the venereal diseases, adequate treatment of infected individuals is one of the most important factors. Many patients take only enough treatment to relieve them of the more troublesome symptoms, their infection becomes chronic and they take no precautions, but engage in practices that facilitate its spread. Some of them go to a druggist who has no better judgment than to sell them a proprietary or "patent" medicine or a refill of a doctor's prescription for another patient; some fall into the hands of unethical or incompetent doctors. It is because of shame or lack of funds that many are treated improperly, inadequately, or not at all.

To the individual, the family and the community the consequences of venereal infection are serious and far-reaching. For those who cannot or will not get treatment, treatment should be provided. There is ample legal authority for apprehending, examining, isolating and treating persons guilty of disseminating gonorrhea, syphilis or chancroid.

BUREAU OF PUBLIC HEALTH NURSING**Ruth E. Mettinger, R.N., Director****PARENT EDUCATION IN A STATE DEPARTMENT OF HEALTH**

From the beginning, the work of the public health nurse has been largely parent education—teaching the parent physical care and something of the physical growth of the child. Inevitably, in discussing the nutritional needs of the child the nurse would be confronted with such questions as “How can I get Johnny to eat green vegetables?” or, “Why does Mary dislike all cereals?” The first schools for the training of public health nurses did not fit us to answer these psychological questions. Because of this need, Miss Annie Gabriel spent a year studying child psychology and parent education.

It seems fitting, then, that the institution of professional parent education in Florida should have been in the State Board of Health. Especially so since the inspiration for the service was the agitation and insistence of a school nurse who had discovered that the community in which she served recognized the need for some information in regard to the mental hygiene phase of child care. So the State Board of Health decided to employ a nurse who would divide her time between regular public health field nursing and parent education.

The service was begun in January, 1931. Eight classes were organized by local Parent-Teacher Associations in the territory between Daytona Beach and Palm Beach. These classes met twice a month. In between classes the instructor carried on a field program of public health nursing. The report of these local Parent-Teacher Associations, at the meeting of their State Convention in April, that they had had the services of a parent education teacher who had been trained for this work under the Parent Education chairman for the National Congress, stimulated other groups to request the service and within a few weeks enough requests had been received to keep the instructor busy during the coming school year. In September, the nurse-instructor was loaned by the State Board of Health full time to the Florida Congress of Parents and Teachers.

The classes were then organized on a county-wide basis, the Parent-Teacher Associations doing the organization work and making up the schedule. The first series was held in Orange County (Orlando) with twenty-two groups meeting once a week for a period of six weeks. It was soon discovered that the teaching schedule was too heavy for the instructor so other localities were notified that the maximum number of classes per week would be fifteen. This was later reduced to twelve. Where a sufficient number of colored people were interested, classes were organized for them. Some of both white and colored classes were held at night so the fathers

BUREAU OF PUBLIC HEALTH NURSING

could attend. Fathers and men teachers were always admitted. As a stimulus to regular attendance, beginning with September, 1931, those who attended four of the six meetings were given a certificate by the State Board of Health. In isolated places, as on the Florida Keys, where there was only one group, the classes met daily for a week. Some of the most interested groups were those in small towns and isolated rural areas. In Tampa, where there are large numbers of Cubans who do not understand English, two groups were organized and instruction given through an interpreter. The interest and attendance at both groups was high.

Each meeting of the group consisted of a short talk by the instructor, followed by questions and round-table discussion. Almost always fifteen minutes or longer was consumed in questions and discussion. Parents are able to make many helpful suggestions to each other. Criticisms of parental treatment of child behavior problems were very frequently sought and graciously received. The topics for discussion were grouped under the headings of Family Relationships, Disciplinary Problems, Character Education, Problems of the School Child, and Problems of the Adolescent Child. Several times a list of topics dealing with the health and physical care of the child was suggested by the instructor but no group was ever interested in this series, although it is significant that of the questions asked by parents at the group meetings the second largest list is the questions about the health care of the child.

In September, 1932, a new service was instituted, that of personal interviews with parents who had problems that required a longer time for discussion than could be had at the time of the group meeting. This has proved fruitful and the mothers' day quite helpful. Many times new light on the problem has come to the mother from her own discussion of the difficulty. These personal interviews were held only on invitation from the parents, never because a neighbor hinted that some mother needed advice.

In the three years of Miss Annie Gabriel's service, all areas of the state have been reached and about one-third (22) of the counties have had classes. About 10,000 individuals have been enrolled one or more times. The enrollment in the classes depended almost entirely on the enthusiasm of the local study group chairman and the preliminary publicity given to the project. In one village of about 200 population, the class enrollment reached 30. Here the study group chairman was a former visiting teacher.

Three outstanding needs have been revealed through the classes. First, the need for several institutes for the training of lay leaders to be held in different sections of the state. No one or two professional parent education teachers can possibly teach all of the child

BUREAU OF PUBLIC HEALTH NURSING

study for parent groups in the state. Second, there is great need for five or six nursery schools directed by trained teachers to demonstrate to parents the value of an understanding of the problems of the normal child. In a state catering to winter tourists as Florida does, the nursery schools would be an added attraction to winter visitors in addition to being of help to all-year residents. The third great need is that of finding some means of reaching the underprivileged parent. Of the 10,000 persons reached, practically none have been underprivileged white parents. The colored and Cuban parents are the only ones of the lower economic status reached.

Although this work has been an outgrowth of the public health nursing program and was inspired by the need of nutritional helps for children, yet it is an educational problem which could well be dealt with by the state school authorities. The hope is here expressed that some provision will be made to continue this instruction, the need and value of which has become so evident.

BUREAU OF LABORATORIES

Paul Eaton, M.D., D.P.H., Director

QUADRATIC EQUATIONS

Is there any reason for believing that a knowledge of algebra and geometry will make a man a better doctor?

It is obviously impossible for a medical student, during the course of his training, to see every disease or abnormality that can afflict mankind, because a man may practice medicine for fifty busy years and still not see every possible diseased condition.

This being the case, it is often necessary for the physician to work from the known to the unknown in matters of diagnosis, by a process we know as "logical reasoning."

An example. It does not appear on inspection that the square erected on the hypotenuse of a right triangle is equal in area to the sum of the squares erected on the other two sides. By close reasoning, however, this relation may be demonstrated.

Now the requiring of a knowledge of certain apparently unrelated subjects as a part of a medical training, works in two ways. First, a man who is mentally incapable of such reasoning as I have referred to, will be automatically "weeded out" before he reaches medical school, and second, those who possess the necessary mental equipment are the better for the exercise of it, even on unrelated subjects.

BUREAU OF LABORATORIES

It may be objected that a majority of the competent physicians now in practice could not solve quadratic equations as they did while they were students. The answer to this argument is that while your collar does not have in it any of the soap and water that cleansed it last week, its appearance is nevertheless the better for the experience.

SUMMARY OF WORK DONE IN THE LABORATORIES OF
THE STATE BOARD OF HEALTH DURING THE
MONTH OF MAY, 1934

	Jacksonville	Tampa	Pensacola	Miami	Tallahassee	Total
Animal Parasites..	3425	1789	343	194	43	5794
Diphtheria	523	266	45	375	36	1245
Typhoid	933	296	41	120	19	1409
Malaria	1243	342	47	54	254	1940
Rabies	9	2	...	3	...	14
Tuberculosis	362	159	31	53	10	615
Gonorrhea	876	377	84	129	78	1544
Kahn	5740	2134	440	1664	441	10419
Water .....	...	57	...	262	...	319
Milk	385	347	331	616	84	1763
Miscellaneous	342	43	79	278	5	747
	13838	5812	1441	3748	970	25809

Specimen containers distributed.....9040

BIOLOGICAL PRODUCTS DISTRIBUTED

Diphtheria Antitoxin.....	10,000 units	35 Packages
	5,000 units	20 Packages
Schick.....		2770 Tests
Toxoid.....		2395 C. C.
Toxin Antitoxin.....		609 C. C.
Typhoid Vaccine.....		5710 Treatments
Vaccine Virus.....		1600 Capillaries
Tetanus Antitoxin.....	1,500 units	3 Packages
Antirabic Virus.....		115 Packages

ALL REQUESTS FOR BIOLOGICAL PRODUCTS SHOULD
BE DIRECTED TO THE STATE LABORATORY,
STATE BOARD OF HEALTH,
JACKSONVILLE, FLORIDA

BUREAU OF VITAL STATISTICS
Stewart G. Thompson, D.P.H., Director

**Recorded and Resident Deaths from Automobile Accidents and Rates
 per 100,000 Population by Counties—Florida, 1933**

Counties	Recorded		Resident	
	Deaths	Rates	Deaths	Rates
0. State	495	31.9	454	29.2
1. Alachua	18	49.5	10	27.5
2. Baker	2	30.8	1	15.4
3. Bay	6	48.8	6	48.8
4. Bradford	7	69.3	6	59.4
5. Brevard	8	54.1	5	33.8
6. Broward	20	80.6	14	56.5
7. Calhoun	2	27.0	2	27.0
55. Charlotte	0	.....	0	.....
8. Citrus	0	.....	1	17.9
9. Clay	1	13.7	2	27.4
62. Collier	2	57.1	3	85.7
10. Columbia	6	40.8	6	40.8
11. Dade	58	33.2	57	32.6
12. DeSoto	2	25.3	2	25.3
56. Dixie	2	25.6	2	25.6
13. Duval	72	42.7	64	37.9
14. Escambia	20	36.4	17	31.0
53. Flagler	3	120.0	3	120.0
15. Franklin	0	.....	0	.....
16. Gadsden	14	43.9	13	40.8
64. Gilchrist	1	23.3	1	23.3
57. Glades	0	.....	1	34.5
65. Gulf	0	.....	0	.....
17. Hamilton	2	21.2	2	21.2
58. Hardee	4	37.7	3	28.3
63. Hendry	2	46.5	2	46.5
18. Hernando	4	78.4	2	39.2
59. Highlands	1	9.2	2	18.3
19. Hillsboro	38	21.8	42	24.1
20. Holmes	1	7.8	1	7.8
66. Indian River	8	102.6	6	76.9
21. Jackson	7	21.7	6	18.6
22. Jefferson	3	22.4	2	14.9

BUREAU OF VITAL STATISTICS

Recorded and Resident Deaths from Automobile Accidents and Rates per 100,000 Population by Counties—Florida, 1933—(Continued)

Counties	Recorded		Resident	
	Deaths	Rates	Deaths	Rates
23. Lafayette	0	....	0	....
24. Lake	2	7.5	4	15.1
25. Lee	6	34.7	7	40.5
26. Leon	9	35.7	7	27.8
27. Levy	2	15.0	2	15.0
28. Liberty	2	49.2	2	49.2
29. Madison	3	19.2	4	25.6
30. Manatee	4	16.0	6	24.0
31. Marion	9	28.7	6	19.1
67. Martin	1	16.7	1	16.7
32. Monroe	1	7.3	2	14.7
33. Nassau	3	32.0	1	10.7
34. Okaloosa	1	9.9	1	9.9
54. Okeechobee	0	....	0	....
35. Orange	23	38.9	18	30.4
36. Osceola	0	....	0	....
37. Palm Beach	15	23.9	17	27.1
38. Pasco	3	27.0	1	9.0
39. Pinellas	12	16.5	13	17.8
40. Polk	18	21.7	17	20.5
41. Putnam	6	31.3	4	20.8
42. St. Johns	7	34.1	4	19.5
43. St. Lucie	9	111.1	8	98.8
44. Santa Rosa	1	7.0	0	....
60. Sarasota	2	13.2	2	13.2
45. Seminole	6	28.3	6	28.3
46. Sumter	1	8.7	2	17.4
47. Suwannee	4	25.4	5	31.8
48. Taylor	7	51.1	6	43.8
61. Union	1	12.3	4	49.4
49. Volusia	20	40.9	14	28.6
50. Wakulla	0	....	2	35.7
51. Walton	3	19.5	4	26.0
52. Washington	0	....	0	....



HUMAN LIFE IS THE STATE'S GREATEST ASSET

FLORIDA



HEALTH NOTES

OFFICIAL MONTHLY BULLETIN

ESTABLISHED JULY, 1892

STATE BOARD OF HEALTH
JACKSONVILLE, FLORIDA

Entered as Second Class Matter, October 27, 1921

at the Postoffice at Jacksonville, Florida, Under the Act of August 24, 1912

This Bulletin will be sent to any address in the State free of charge.

Vol. 26

AUGUST, 1934

No. 8

Edited by

STEWART G. THOMPSON, D. P. H., Member
American Medical Editors' and Authors' Assn.

ARTICLES

DENGUE — *Hanson*

INFANTILE PARALYSIS — *Brink*

CREDIT WHERE CREDIT IS DUE — *Eaton*

SANITARY TOILETS FOR SCHOOLS — *Lenert*

NATIONAL REGISTRATION AFFAIRS — *Thompson*

MATERNITY AND INFANCY PROGRAM — *Mettinger*

HENRY HANSON, M. D., STATE HEALTH OFFICER

Also Executive Officer and Secretary of Board

BOARD MEMBERSN. A. Baltzell, M. D., Pres.
MariannaHarry Dash Johnson, M. D.
Daytona BeachR. L. Hughes, M. D.
Bartow**STATE HEALTH OFFICER**Also Executive Officer and Secretary of Board
Henry Hanson, M. D.**BUREAUS AT JACKSONVILLE****DIRECTORS**

Laboratories.....	Paul Eaton, M. D., D. P. H.
*Vital Statistics.....	Stewart G. Thompson, D. P. H.
Communicable Diseases.....	F. A. Brink, M. D.
Engineering.....	Louva G. Lenert
Public Health Nursing.....	Ruth E. Mettinger, R. N.
Accounting.....	G. Wilson Baltzell
Librarian.....	Elizabeth Bohnenberger

*Registration Inspector.....	Anna C. Emmons
Drug Store Inspector.....	M. H. Doss
Assistant Drug Store Inspector.....	Frank S. Castor

LABORATORIES

Jacksonville.....	Pearl Griffith, B. E.
Miami.....	E. R. Powell
Pensacola.....	Johnette McCormick
Tallahassee.....	Estelle Bryan
Tampa.....	H. D. Venters, B. S.

MEDICAL OFFICERS

DeFuniak Springs.....	C. W. McDonald, M. D.
Inverness.....	Leland H. Dame, M. D.
Jacksonville.....	W. A. Claxton, M. D.*
Tallahassee.....	H. A. McClure, M. D.
Tampa.....	C. W. Pease, M. D.

*(And Tuberculosis Clinician)

DISTRICT SANITARY OFFICERS

Milton.....	T. S. Kennedy, M. D.
Ocala.....	C. A. Holloway
Orlando.....	Russell Broughman
West Palm Beach.....	S. D. Macready
On "FERA" Duty.....	Fred A. Safay

PUBLIC HEALTH NURSES

Jacksonville.....	Joyce Ely, R. N. (Asst. Director)
Ft. Pierce.....	Annie Gabriel, R. N.
Jacksonville.....	Johanna L. Sogaard, R. N.
Marianna.....	Lalla Mary Goggans, R. N.
Tampa.....	Julia O. Graves, R. N.

MALARIA RESEARCH

Tallahassee.....	Mark F. Boyd, M. D. (Rockefeller Foundation)
------------------	---

MALARIA CONTROL STUDIES

Jacksonville.....	T. H. D. Griffiths, M. D. (U. S. Public Health Service)
-------------------	--

CONSULTANT IN ENTOMOLOGY

Orlando.....	W. V. King, Ph. D. (U. S. Bureau Entomology)
--------------	---

DIRECTORS FULL TIME COUNTY HEALTH UNITS

Tallahassee, Leon County.....	L. J. Graves, M. D.
Pensacola, Escambia County.....	W. A. McPhaul, M. D.

ADMINISTRATION

Henry Hanson, M.D., State Health Officer

DENGUE

It has recently been definitely established that an epidemic of dengue prevails in Miami. Dengue is in a sense a tropical disease but is not necessarily limited to the tropics and may appear in any community where conditions exist favoring *Stegomyia* breeding. It was formerly thought that dengue was carried by a species of culex mosquitoes such as *culex fatigans* and the *culex quinquefasciatus*.

The work of Siler Hall and Hitchens of the United States Army Medical Corps in Manila in the years 1924, 1925 and 1926, definitely proved that the *Aedes aegypti*, more commonly known as *Stegomyia*, is the sole carrier of this troublesome disease. Fortunately, there is practically no mortality associated with dengue, but it is a very prostrating and rapidly spreading malady, often referred to as breakbone fever. It has been confused with many other diseases, and recently in this State has been diagnosed as intestinal influenza. It is not necessary to go into a discussion of symptoms in an article of this kind, since that is a matter for the medical profession and adequate information is available in text books and medical journals.

There is a very cryptic editorial in the Journal of the American Medical Association, Volume 86, under date of February 6, 1926, which eulogizes the heroism of the army volunteers who offered themselves as experimental subjects in order that the transmission of this malady might be definitely established. To show the abnegation of the men I quote the following: "As if the expected had occurred in the line of duty we are told of the military personnel, — 64 men who proffered their services voluntarily for experimentation relating to transmission of dengue fever by mosquitoes." Nothing was said of the pains and mental depression, as well as marked physical prostration which often follows an attack of dengue.

It was found in these experiments that persons in the late prodromal stages of 6 to 18 hours prior to the onset of the fever are infective to the *Aedes aegypti*. Once these mosquitoes are infected they continue infective for the balance of their lives. The length of the period of incubation, after the patient has been bitten by an infected mosquito, varies from 4 to 10 days. In 89% of the experiments, the incubation period was from 4 to 6 days.

Inasmuch as the mode of transmission of this disease is definitely known, the necessary protective measures for controlling, as well as preventing, an epidemic of this kind are clear cut. An effective campaign directed against the breeding places of the mosquitoes will promptly stop the disease. While it is true that under artificial conditions the mosquitoes (*Stegomyia*) may live from 40 to 70 days or more, the majority of mosquitoes under natural conditions do not live

ADMINISTRATION

that long. In extensive campaigns for the control of the *Aedes aegypti*, observations indicate that the majority of mosquitoes die or are destroyed by one factor or another in about three weeks. It has also been found in such campaigns that diseases which are transmitted by the *Aedes aegypti* terminate within 6 weeks after the mosquitoes have been reduced to a very low breeding index.

All city health departments should take immediate steps to destroy the breeding places of this mosquito. The present situation is one which calls for full coöperation by State and municipal authorities. Municipalities should divert funds, making them available for use by health officers in employing personnel who should, during the next two months at least, devote their full time to inspection of breeding places and to the elimination of *Stegomyia* breeding. Some experience and training is required for this purpose. The State Health Department and the various municipal health departments will furnish supervision and instruction necessary for prompt control and eradication of the epidemic. Unless active control measures are adopted and supported by the public, the epidemic will spread to all communities where *Stegomyia* mosquitoes prevail.

The *Stegomyia* breeds in artificial containers, such as tanks, cisterns, wells, tin cans, broken bottles, old abandoned tire casings, flower vases, gutters, etc., where water remains for a period of 10 days or two weeks. They do not (in this country) breed in swamps, ponds or ditches.

Each health officer should regard the present outbreak of dengue as a menace to the health of the people in his community and should inform the political authorities of the danger of a wide dissemination unless resources are promptly made available for a vigorous anti-*Stegomyia* campaign.

THE PHYSICIAN AND THE HEALTH OFFICER

All of the hygiene measures recommended today are based on discoveries of the physician and the chemist during the last 60 to 65 years.

In the beginning, man knew practically nothing about the causes of diseases or how to treat them. There seemed to be a clearer conception of the treatment of injuries. The archaeologists have presented evidence of the setting of bones by means of splints as early as 30,000 years ago, or in the age of paleolithic man. Our earliest history of the practice of medicine seems to be about 4,500 years ago, among the Egyptians, who were leaders in the medical sciences for many centuries. Good progress was made until the early middle ages when the people appear to have lost all balance of judgment and

ADMINISTRATION

became incapable of logical reasoning, giving away to superstition and bigotry as a result of a fanatical concept of religion, a curious distorted interpretation of the teachings of Jesus Christ. The religious insanity of the Crusaders seemed to put one obstacle after another in the way of the intelligent, honest physician, finally culminating in the disgraceful mad persecution of alleged witches. The religious mania set the clock of progress back at least a thousand years. Many things which could and would have been discovered could not be announced because of contradicting the religious teaching of the times, which usually meant the offender was burned at the stake.

We know that some of the fundamental principles of sanitation were taught by Moses, but when it comes to the actual causes of diseases (sickness), it seems that no one knew anything until the latter half of the nineteenth century when, curiously, a chemist, Louis Pasteur, found some of his chemical reactions were the result of the action of minute living micro-organisms and not the inanimate chemical change it had been regarded up to that time. This led from one discovery to another. In a few years the medical men of all countries began a study of bacteria and the relation to sickness with an array of new facts coming so rapidly that for a while the practicing physician was quite bewildered.

After a study of the nature of many of the bacteria it was soon found that by a proper treatment of these newly found elements, they could be made into substances which would prevent their own development in the human body. For example, diphtheria which formerly had a mortality (death rate) of 50% of those attacked, dropped to less than 8% in a few years.

These discoveries soon brought out two phases of medicine or the practice thereof; (1) preventive, (2) curative. The conscientious general practitioner practices both. Some wonder why the doctor is always trying to work himself out of a job.

INFANTILE PARALYSIS

It was formerly thought that the diagnosis of infantile paralysis could not be made until the child was paralyzed. This is a gross error, for most cases can be diagnosed before the paralysis occurs. This diagnosis, however, depends to a considerable extent on the examination of what is known as the spinal fluid; that is, the fluid which can be removed through a puncture of the lower part of the back.

The family doctor should be given full authority to call in consultation a child specialist and a nerve specialist, according to Dr. Philip Lewin who writes on "Infantile Paralysis" in the August *Hygeia*.

BUREAU OF ENGINEERING**Louva G. Lenert, Director****SANITARY TOILETS FOR SCHOOLS**

In providing toilets for schools, a number of factors should be given consideration because a satisfactory installation at one school may be entirely inadequate at another.

Pit Toilets

For schools not having flush toilets, the pit type will prove satisfactory for one- to four-teacher schools, enrolling not over 125 pupils. For permanence the vaults should be constructed of concrete or brick with reinforced concrete slab top, but if properly constructed and maintained, wood will make a very satisfactory temporary installation.

No pit toilets for schools should be installed with less than two-seat capacity. This size is suitable for one- and two-teacher schools of no greater enrollment than 60 pupils. For three-teacher schools (up to 90 pupils) three-seated toilets may be used, and for a maximum of 125 pupils a double unit of four seats should be used.

If it is deemed advisable to provide separate accommodations for teachers and pupils, then an extra seat should be provided in each of the above installations. The practice of locking off a portion of the needed capacity for teachers' use creates a shortage of facilities. It is suggested that greater attention be given to proper maintenance of school privies, making it unnecessary to have separate facilities for pupils and teachers.

Pit toilets must be cleaned regularly and kept in sanitary condition the same as indoor toilets. Excreta removed should be buried immediately. The use of toilet paper exclusively will not fill the pit as rapidly and will also promote better bacterial action in reducing the solid contents of privies. Urinals must always be installed in connection with privies for boys.

Flush Toilets and Septic Tanks

For schools of more than 125 pupils it is necessary to provide a better method of excreta disposal than is available in the pit type construction.

It has long been recognized that flush toilets, and septic tanks with drain fields are the most satisfactory installations for larger schools not located near city sewer lines.

Flush toilets may be installed inside of the school building, giving greater protection to the pupils in inclement weather, as well as insuring stricter observance of the pupils by the teacher in maintaining sanitary standards.

BUREAU OF ENGINEERING

Incinerator Toilets

A very satisfactory toilet installation for schools having more than 150 pupils is the incinerator type.

This is in a way an adaptation of the pit toilet in which the excreta is destroyed by burning. It is equipped with vault, stack and heater, which makes it adaptable for use inside of school buildings without causing disagreeable odors or nuisances.

Where water under pressure in sufficient quantity for operation of flush toilets is not available, this installation will serve very admirably and is in many cases superior to the water carriage system. It is unnecessary to specify any type of toilet paper as there is no bacterial action in this system and anything combustible is consumed in the incineration process.

This type consists essentially of a brick, fireproof vault open to the atmosphere at one end and to a stack at the other end for drawing off odors and gases of combustion during incineration. A stack heater (stove) is placed in the bottom of the stack for inducing a draft during periods of murky weather when there may be a tendency to down drafts in the stack. The floor of the vault is built of loose bricks with an open air space of 6 inches under the floor. The vault is covered with iron floor plates which are placed level with the toilet room floor. Each floor plate has an opening to the vault over which is an iron riser to the top of which is attached a regulation toilet seat and cover.

In operation a small handful of wood is placed under each opening at the beginning of the season. This serves as fuel for burning, but is most valuable as ventilating material. To burn out this material not over one quart of kerosene is poured into the opening nearest the stack, and it is then ignited. Seat lids are propped open as the fire burns backward through the vault. This is done to provide a downward draft and also to prevent burning of the wooden seat cover.

The number of seats required is calculated the same as in other types of toilet construction for schools.

In the boys' toilet it is necessary to construct a urinal connected by a trough to the vault and stack. This may be the slate type against the wall with slot at floor level connected to trough, or a commercial product known as "Transite" may be substituted for the slate back. The latter of one-quarter inch thickness is quite as impervious, much lighter in weight and much less expensive.

There are several manufacturers making the combined floor and riser units and stack heaters, the names of which will be given upon request to the Bureau of Engineering, State Board of Health, Jacksonville.

BUREAU OF LABORATORIES

Paul Eaton, M.D., D.P.H., Director

CREDIT WHERE CREDIT IS DUE

Our system of education is so constituted as to give many persons an exceedingly bad training. I refer in particular to the habit, all too common, of putting off work that should be done day by day with the intention of making up by extra spurts of energy on extraordinary occasions. This is the tendency to neglect daily study and "cram for examination." To the extent that our schools encourage this habit in its pupils, it does them a disservice. It is of course true that many a student has "crammed" or "boned" for examination and passed the examination with flying colors, but success won in that way is as dangerous as money won by gambling. It inculcates a bad habit.

What, for instance, would happen to a professional baseball player who wouldn't do his best until the big game of the season? It requires no prophetic gift to know that there wouldn't be any "big game of the season" for him. The fierce light of publicity that beats upon the ball player makes it rather easy for him to keep "on his toes," but there are others who must do their best at all times without the aid of publicity and competition.

Laboratory workers must put forth their best efforts at all times. If your child had a "sore throat" and you were anxiously awaiting a report from the laboratory, it would not comfort you a great deal to imagine that the technician who was making the examination was likely to "scamp" the job and hope to do better next week.

Technicians are human and do make mistakes, but I do not know any class of people more entitled to respect for faithful performance of duty.

SUMMARY OF WORK DONE IN THE LABORATORIES OF
THE STATE BOARD OF HEALTH DURING THE
MONTH OF JUNE, 1934

	Jacksonville	Tampa	Pensacola	Miami	Tallahassee	Total
Animal Parasites	2042	660	337	213	61	3313
Diphtheria	543	317	53	186	16	1115
Typhoid	1120	277	61	137	34	1629
Malaria	1333	445	87	65	266	2196
Rabies	298	94	51	64	14	521
Tuberculosis	819	301	68	157	75	1420
Gonorrhea	5410	1619	525	1357	374	9285
Kahn	20	2	...	2	...	24
Water	...	53	...	214	...	267
Milk	211	372	570	564	66	1783
Miscellaneous	310	43	176	355	4	888
	12106	4183	1928	3314	910	22441

BUREAU OF LABORATORIES

Specimen containers distributed.....8189

BIOLOGICAL PRODUCTS DISTRIBUTED

Diphtheria Antitoxin.....	10,000 units	39 Packages
	5,000 units	8 Packages
Schick.....		690 Tests
Toxoid.....		1140 C. C.
Typhoid Vaccine.....		2045 Treatments
Vaccine Virus.....		510 Capillaries
Tetanus Antitoxin.....	1,500 units	7 Packages
Antirabic Virus.....		22 Packages

ALL REQUESTS FOR BIOLOGICAL PRODUCTS SHOULD
BE DIRECTED TO THE STATE LABORATORY,
STATE BOARD OF HEALTH,
JACKSONVILLE, FLORIDA

BUREAU OF PUBLIC HEALTH NURSING

Ruth E. Mettinger, R.N., Director

THE NURSE'S PART IN A MATERNITY AND
INFANCY PROGRAM

What is the nurse's responsibility to expectant parents? Our duty to the future parents falls into two categories — instruction and service. Every nurse should see that the expectant mothers and fathers under her care understand the simple physiological facts of childbearing as well as the health and hygiene of pregnancy, of delivery, the postpartum period of the mother and the postnatal period of the newborn. According to the standing orders of her local medical society or of individual physicians, the nurse also owes each expectant mother a careful observation of the progress of the pregnancy and her general physical condition. She also provides or helps the parents secure proper nursing care during and after delivery for both mother and baby.

The home is the best place in which to give instruction. In the rural as well as the urban districts, money has not been plentiful; for this reason, the nurse should teach the mothers, individually or in groups, how to improvise. Much depends on the nurse — her training, her ingenuity in improvising, her personality, and her ability in translating her knowledge into simple English. Everything usable in the home which would obviate the purchase of material should be made use of since the purchase of obstetrical material is expensive and this is the reason most often given the nurse for not having adequate supplies.

But more important than any of the above is the responsibility of the nurse to see that the mother returns regularly to her physician

BUREAU OF PUBLIC HEALTH NURSING

or to the prenatal clinic for medical supervision which should be continued after delivery. A postpartum examination should be had at six weeks, a later one at six months, and a third when the baby is one year old. Thus is insured complete recovery to a normal state, a necessary, but a too often unobtained condition to be reached before another pregnancy takes place. Furthermore, no nurse should dismiss a maternity case without making sure the parents are both agreed to have the mother register for medical care the next time as soon as she knows she is pregnant. By careful planning and weekly saving, most parents can finance at least part of the delivery, which naturally makes them feel much more independent and gives the physician a better feeling.

We are anxious to continue in Florida the good work already started with our school children, but one of the most effective measures to stem the tide of defects and disease in school children is to anticipate the beginning of such defects and to take steps to prevent them. Since most of the nutritional diseases of infancy in the preschool and school child have their incipient stages while the infant is yet unborn, it follows that a vigorous program of adequate care for all prospective mothers will do much to prevent many of them.

The community problem of maternity has two important aspects. First, there is the attitude of people toward childbirth who regard it as a natural process which needs no special attention. Unfortunately this attitude is shared by many expectant mothers. The public health nurse, then, in all her contacts with patients, with her committee, with other professional groups, and with the rank and file of citizens should enthusiastically spread the gospel of adequate maternity care. She must make all those with whom she comes in contact realize the personal loss to an infant and to a family and the cost to the community of a mother's life. There must be a persistent educational campaign whereby all important civic and social groups will be reached regularly each year. Much can be done and should be done on Mother's Day to give the lay public an understanding of what constitutes proper medical care. However, to everyone interested in maternity and infancy, every day is Mother's Day.

Such a program will be effective only as it is sponsored by the medical group in the community. In fact, the inauguration of an intensive program of publicity relative to maternity and infancy should start from within the medical group and be continued with their active support. Therefore, the nurse can best serve the community in this matter by working very closely under the leadership of the medical profession. Her very first problem, then, may be to persuade the physicians to take that leadership. It matters not by whom a prenatal case is reported, the nurse should urge the patient to see a physician, or secure from him orders as to advice and care

BUREAU OF PUBLIC HEALTH NURSING

for the patient. In 1932, approximately a third of the Florida births were attended by midwives.

The second aspect of the community problem is concerned with resources for obstetrical care for those unable to pay for the services of a private physician. In some of our more remote areas, there is no medical care even were the mothers able to pay. Even as an educational program must be sponsored by the physician, so also must any program to improve or to increase existing facilities for the care of prospective mothers throughout the entire maternal cycle. Public Health Nurses are being confronted daily with pregnant mothers unable to pay for care. Those on Federal relief do not present such a problem, but there are many who are not on relief who are unable adequately to provide medical care. These cases present a real problem.

There are several possible ways of increasing resources, one or all of which may be used:

First: Assuming that the hospital—if there is one—cannot care for all indigent cases, arrange with private physicians to alternate in giving free care to expectant mothers who will come to their offices.

Second: Develop Maternity Centers as part of a health center to which expectant mothers may come for medical and nursing supervision and instruction. Here the newborn infant may be watched by the doctor and nurse. Instead of conducting a prenatal clinic at this center, private physicians may wish to examine their free cases in their offices rather than in the center.

Third: In isolated communities and in communities where there are no doctors perhaps none of these plans is feasible. Then it is a question of securing care in some city hospital—perhaps even persuading the mother to remove herself to relatives in the town or city until the baby is born. Until she goes, the nurse should watch the progress of her pregnancy with extreme care.

No public health nursing program of maternity and infancy will succeed unless it is sponsored and actively supported by the doctors.

"Every detail of maternity work originates in and is guided by the medical profession. From the uniform machinery of official organizations down to prophylactic use of silver nitrate in the babies' eyes, the entire scheme is the interpretation and application of medical teaching." (Van Blarcom).

The objective of the Public Health Nurse should be to secure for every mother:

The minimum of mental and physical discomfort during pregnancy.

The maximum of mental and physical fitness when the baby comes.

The reward of a well newborn baby.

The knowledge of how to care for herself and the baby.

BUREAU OF COMMUNICABLE DISEASES**F. A. Brink, M.D., Director****DOGS**

The hot summer months are most uncomfortable for our woolly domestic pets. When they become overheated they are prone to suffer from digestive or other diseases and to have fits. These seizures often simulate rabies. Many dogs with fits are believed to be "mad" (rabid) but many dogs have gone mad when their owners believed they had fits and that is a much more serious mistake. Often many persons and animals are bitten by such a dog and an epidemic of rabies results.

A dog is usually a faithful friend of man and worthy of all kindness, but allowing a dog to go mad is about the most unkind thing we know, especially since a single "shot" each year, given by the veterinarian, will nearly always protect any dog from this terrifying disease. This is particularly important, too, as a protection to the children and other members of the family.

Rickets

Rickets is a disease particularly of infants and children. It is usually insidious in its onset, sometimes so mild as to escape notice until the little patient is ill of some other disease and the doctor discovers the evidence in the course of his examination or perhaps by X-ray. Rickets is prevented by proper exposure of the skin to direct sunlight; hence, its relative rarity in Florida and other tropical or subtropical areas. It is also prevented by codliver oil and other oils which contain a substance known as vitamin D. The earliest symptoms are restlessness, irritability and head sweating, but these may be from other causes. If due to rickets, the bony changes characteristic of the disease will soon appear. The rib ends near the breast-bone become enlarged, the head becomes somewhat square in shape, and there is a tendency to bowlegs. The chest is likely to become deformed and the abdomen enlarged. These signs do not all appear at the same time or in each patient.

Diet and sunlight are the two factors to have in mind to prevent rickets.

The State Board of Health is anxious that doctors, particularly pediatricians, write in and state their opinions about rickets in Florida, particularly as to its prevalence, distribution among the races and its severity.

BUREAU OF COMMUNICABLE DISEASES

Parents Who Prefer Puny Children

If all parents realized thoroughly the fact that hookworm disease does more harm to Florida children than any other disease; that it takes out of a child's life a great deal of the pep and happiness that normal parents love to see; that it handicaps the child in his mental and physical growth, and therefore, works against his greatest possible success in life; that in cash and discomfort the cost of treatment is much more than that of prevention; if all parents could but realize all this, then we believe they would go to work with pick and shovel, brick and mortar, hammer and saw to construct sanitary privies, stop this inexcusable scourge and put Florida in the front rank for health and sanitation.

To Prevent Malaria

Most of the Florida country homes are built on a plan that permits free circulation of air, not only through unscreened doors and windows, but through cracks, knotholes, chimneys and even through holes in the roof that admit sunshine and rain. Through all these openings mosquitoes may enter at will, bringing with them the deadly germs of malaria. Soon the generation of people will all be gone who do not believe mosquitoes transmit malaria.

How much longer our good country folk will neglect the mosquito-proofing of their homes to prevent "chills and fever" no one can say, but we still urge screening — mosquito-proofing — all homes as the best way to prevent malaria.

Infantile Paralysis

Because of the unusual prevalence of infantile paralysis in another State, the appearance of the usual number of cases in Florida creates undue alarm. Up to July 19th, the date of this writing, there had been only the usual number of cases, and we see no cause to expect an increase, though we realize that to be a possibility. "Nowhere in the United States," says Surgeon General Hugh S. Cumming of the United States Public Health Service, "is there freedom from the danger of infantile paralysis infection during the summer months." There is nothing about the Florida situation to cause alarm or to necessitate unusual restrictions. Ordinary hygienic measures offer best protection. Avoid common drinking cups and unnecessary crowding and keep children from visiting in homes where there is sickness.

It is quite usual for people to become alarmed about some unusual outbreak. Tuberculosis claims something like one thousand lives a year in Florida. We wish people would become sufficiently alarmed about that to do something about it. A sanatorium would help greatly.

BUREAU OF VITAL STATISTICS**Stewart G. Thompson, D.P.H., Director****NATIONAL REGISTRATION AFFAIRS**

Definite progress in national registration affairs was evidenced by the holding of a very unusual meeting of State registration executives at Montgomery, Alabama, on June 22 and 23. This meeting was arranged and financed by the United States Bureau of the Census. The two-day meeting was presided over by Dr. T. F. Murphy, Chief Statistician for Vital Statistics, Bureau of the Census, Washington, D. C. The State officials who attended the meeting were as follows:

Alabama	Dr. W. Thurber Fales	Missouri	Dr. W. F. Lunsford
Arkansas	Mrs. J. B. Collie	North Carolina	Dr. R. T. Stimpson
Florida	Dr. Stewart G. Thompson	Oklahoma	Mrs. Juanita Johnston Smith
Georgia	Mr. Butler Toombs	South Carolina	Dr. Martin B. Woodward
Illinois	Mr. Sheldon L. Howard	Tennessee	Mr. Robert H. White
Maryland	Dr. John Collinson	Texas	Dr. W. A. Davis
Michigan	Dr. W. J. V. Deacon	Virginia	Dr. W. A. Plecker
Mississippi	Dr. R. N. Whitfield	West Virginia	Dr. John F. Cadden

There were no formal papers read, as the entire time, both in morning and afternoon sessions, was taken up in the discussions of important questions related to registration. As each question was presented by the presiding officer, the representative from each State gave his version as applied to the laws, rules or policies in effect in his own State. Among the questions submitted were the following:

How many registrars are there in your State? Who appoints local registrars? Who pays the registrars? How? When? How much? Do registrars serve more than one district? Must they reside within their respective districts? What arrangement is made for rearrangement or combination of registration districts? Who is responsible for obtaining statements on the death certificates with reference to personal particulars? In the case of death without medical attendance, who is responsible for the medical portion? In rural districts, what provision is made for issuing a burial permit if the certificate cannot be completed at once? When supplemental information is obtained, is it written on the face of the original certificate, or is it filed in the form of an affidavit? When certified copies are issued, is the supplemental information included with the certified copy? What arrangements do you make for filing delayed birth certificates? Who has access to the records within your State? How public are they? Who has authority to grant access to them? Are convictions attempted for failure to report births or deaths?

BUREAU OF VITAL STATISTICS

This list of questions and many others formed the basis of the discussions. Space will not allow the inclusion in this short write-up of the answers to the questions presented or the comments offered during the discussions. It is hoped that a full report may be available at a later date through the Bureau of the Census.

In opening the conference, Dr. Murphy said, in part: "In the first place, we have felt in the office that there should be a meeting of those who are actively and personally engaged in the collection of vital statistics, in the handling of the certificates, responsible for their collection and so-forth. The meetings of the Vital Statistics Section of the American Public Health Association have relatively few registrars in attendance, and we in the Federal government feel as you do that you have many problems that should be settled among yourselves and can only be settled by an intimate discussion of your own affairs. * * * You have a racial problem — a certain number of diseases peculiar to this particular area — and now we have gotten together for the first time and I hope this meeting will be such a success that we will be fully warranted in calling registrar conferences annually throughout the United States."

Dr. Murphy's genuine interest in those who are carrying the burden in registration affairs has been a great stimulus and encouragement. Since this conference was made possible by Honorable W. L. Austin, the Director of the Bureau of the Census, his interest and sympathy are thereby evidenced. This wonderful support from the Census Bureau officials is a real asset in securing more complete and better vital statistics records.

THE JOY OF LIVING

"You can do a great service for yourself by learning how to find happiness day by day, by developing an appreciation of joyful living, by becoming intoxicated with life," Alfred E. Parker advises in the August *Hygeia* in the twenty-fourth and last chapter of his serial, "Training for Athletics and Health." "What an experience it would be if you could drink from a magic, golden chalice a precious fluid that would bring you health and happiness and joy each day. But there is no such literal chalice from which to drink. Nevertheless, you can have health, you can revel in the joy of living by drinking of the cup of wisdom.

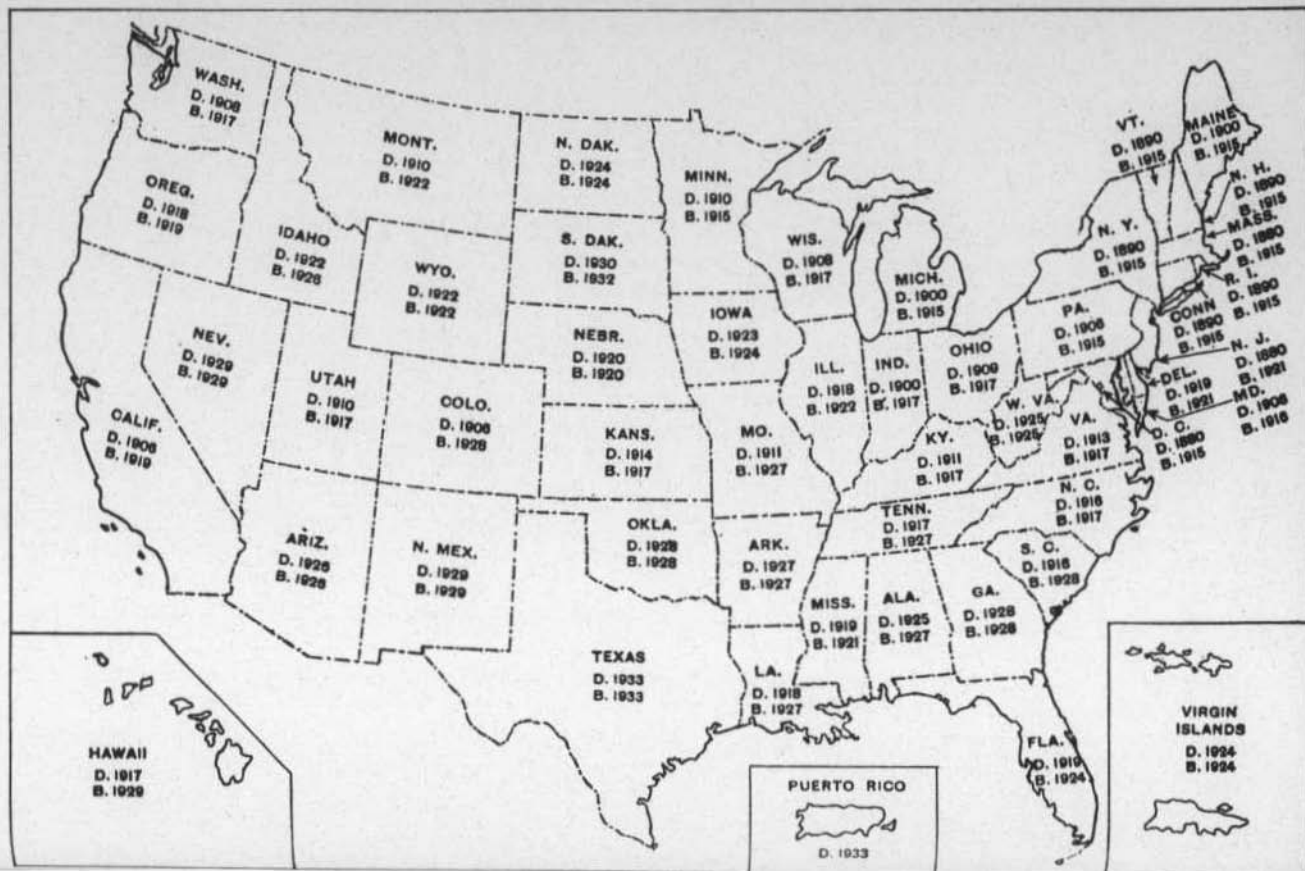
"The joy of living is everywhere. Many have found it. Many others are searching for it. After all, it is not so hard to find. If you journey the road to health, you will find that in most cases the joy of living is quite within your grasp, and you will want to live for the very joy of living!"

BIRTH AND DEATH REGISTRATION AREAS

Continental United States: 1933

HAWAII, PUERTO RICO, VIRGIN ISLANDS

Years indicate date of entrance into registration areas for Birth (B) or Death (D)



HUMAN LIFE IS THE STATE'S GREATEST ASSET

FLORIDA



HEALTH NOTES

OFFICIAL MONTHLY BULLETIN

ESTABLISHED JULY, 1892

STATE BOARD OF HEALTH
JACKSONVILLE, FLORIDA

Entered as Second Class Matter, October 27, 1921
at the Postoffice at Jacksonville, Florida, Under the Act of August 24, 1912
This Bulletin will be sent to any address in the State free of charge.

Vol. 26

SEPTEMBER, 1934

No. 9

Edited by

STEWART G. THOMPSON, D. P. H., Member
American Medical Editors' and Authors' Assn.

ARTICLES

FOMITES—*Brink*

SPICE OF LIFE—*Lenert*

PERSONAL LIBERTY—*Eaton*

PRESCHOOL NURSING CARE—*Mettinger*

CONTROL OF DENGUE EPIDEMIC—*Hanson*

MORTALITY, CERTAIN DISEASES, 1934—*Thompson*

HENRY HANSON, M. D., STATE HEALTH OFFICER
Also Executive Officer and Secretary of Board

BOARD MEMBERSN. A. Baltzell, M. D., Pres.
MariannaHarry Dash Johnson, M. D.
Daytona Beach* R. L. Hughes, M. D.
Bartow**STATE HEALTH OFFICER**Also Executive Officer and Secretary of Board
Henry Hanson, M. D.**BUREAUS AT JACKSONVILLE****DIRECTORS**

Laboratories.....	Paul Eaton, M. D., D. P. H.
*Vital Statistics.....	Stewart G. Thompson, D. P. H.
Communicable Diseases.....	F. A. Brink, M. D.
Engineering.....	Louva G. Lenert
Public Health Nursing.....	Ruth E. Mettinger, R. N.
Accounting.....	G. Wilson Baltzell
Librarian.....	Elizabeth Bohnenberger

*Registration Inspector.....	Anna C. Emmons
Drug Store Inspector.....	M. H. Doss
Assistant Drug Store Inspector.....	Frank S. Castor

LABORATORIES

Jacksonville.....	Pearl Griffith, B. E.
Miami.....	E. R. Powell
Pensacola.....	Johnette McCormick
Tallahassee.....	Estelle Bryan
Tampa.....	H. D. Venters, B. S.

MEDICAL OFFICERS

DeFuniak Springs.....	C. W. McDonald, M. D.
Inverness.....	Leland H. Dame, M. D.
Jacksonville.....	Thos. E. Morgan, M. D.
Jacksonville.....	W. A. Claxton, M. D.*
Tallahassee.....	H. A. McClure, M. D.
Tampa.....	C. W. Pease, M. D.

*(And Tuberculosis Clinician)

DISTRICT SANITARY OFFICERS

Milton.....	T. S. Kennedy, M. D.
Ocala.....	C. A. Holloway
Orlando.....	Russell Broughman
West Palm Beach.....	S. D. Macready
On "FERA" Duty.....	Fred A. Safay

PUBLIC HEALTH NURSES

Jacksonville.....	Joyce Ely, R. N. (Asst. Director)
Ft. Pierce.....	Annie Gabriel, R. N.
Jacksonville.....	Johanna L. Sogaard, R. N.
Marianna.....	Lalla Mary Goggans, R. N.
Tampa.....	Julia O. Graves, R. N.

MALARIA RESEARCH

Tallahassee.....	Mark F. Boyd, M. D. (Rockefeller Foundation)
------------------	---

MALARIA CONTROL STUDIES

Jacksonville.....	T. H. D. Griffiths, M. D. (U. S. Public Health Service)
-------------------	--

CONSULTANT IN ENTOMOLOGY

Orlando.....	W. V. King, Ph. D. (U. S. Bureau Entomology)
--------------	---

DIRECTORS FULL TIME COUNTY HEALTH UNITS

Tallahassee, Leon County.....	L. J. Graves, M. D.
Pensacola, Escambia County.....	W. A. McPhaul, M. D.

ADMINISTRATION**Henry Hanson, M.D., State Health Officer****PROGRESS IN CONTROL OF THE DENGUE EPIDEMIC**

In the last number of Health Notes I made a brief statement of the reported outbreak of dengue in the southern portion of the State and in the same article referred to the work of the Army Medical Corps in definitely working out the transmission of dengue. This work has given us a very definite procedure which in practically all respects is identical with the one for the control of yellow fever.

In a way it is fortunate that this outbreak of dengue occurred, in that it revealed the aegypti incidence throughout the State as probably nothing else would. The State Board of Health, in coöperation with the municipal health departments, has launched a campaign for the control and stopping of the dengue epidemic. Circulars have been gotten up containing information as to the nature of dengue and its transmission. We have gotten out literature advising about what is necessary to do in order to stop the breeding of the mosquito which is the carrier of dengue. Both in the public press and by conferences and talks before organizations a concerted effort has been made to spread knowledge in regard to this disease and its prevention. Letters were sent out to some 280 or more incorporated municipalities asking the municipality to put on a clean-up campaign. The response has been most gratifying and up to date we have had no refusals of our requests for a clean-up. It will be necessary, however, to continue this activity for a period of eight or ten weeks. It is not necessary to continue a large force of men after the first thorough surveys. As a result of the first surveys a great deal of refuse has been found and brought out to the street to be gathered up by trucks and carried away to dumps where it can be properly destroyed. In the first surveys we recommended one inspector to each district of about 2,000 population. After the inspector has learned a little more about the breeding habits of the mosquito he can cover more territory and as the work goes on the force of men can be materially reduced.

Dengue control is a municipal responsibility. The breeding of the mosquito concerned in dengue is primarily due to individual neglect in leaving receptacles about the back yard or in the adjacent weeds which contain water and form breeding places for the mosquitoes.

The greatest difficulty which the State Board of Health has in this epidemic is in the lack of supervisors trained in this type of mosquito control work. The present indications are that a definite check is being placed on dengue and we are very hopeful that we

ADMINISTRATION

shall not have a State-wide epidemic. The spread of dengue, however, is a definite index of the distribution of aegypti breeding. The towns having no aegypti breeding need have no worry about the spread of dengue. If a case is introduced into such a town there will be no additional cases as a result of the introduction of dengue.

LIBRARY

READING LIST ON CHILD HEALTH FOR THE USE OF PUBLIC HEALTH NURSES

Preschool Child

- Child Care and Training—Faegre, M. L. and Anderson, J. E.
Child from One to Six—Arlitt, A. H.
Childhood Type of Tuberculosis—Chadwick, H. D.
Everyday Problems of the Everyday Child—Thom, D. A.
Growth and Development of the Young Child—Rand, Winifred.
Guidance of Mental Growth in Infant and Child—Gesell, Arnold.
Habit Clinics for the Child of Preschool Age; Their Organization and Practical Value—Thom, D. A.
Home Care of Infant and Child—Tisdall, F. F.
Mental Growth of the Preschool Child—Gesell, Arnold.
National Research Council Committee on Child Development, Proceedings, 1933.
Organizing Rural Preschool Conferences—reprint from Public Health Nursing.
Our Health Habits—Whitcomb, C. T. and Beveridge, J. H.
Parents and the Preschool Child—Blatz, W. E.
Postwar Progress in Child Welfare—Annals American Academy Political Science, September, 1930.
Psychological Care of Infant and Child—Watson, J. B.
Psychology of Infancy and Early Childhood—Arlitt, A. H.
Rural Public Health Service—Freeman, A. H.
Rural School Nursing—American Red Cross.
Teamwork Between the Nurse and the Social Worker—Byington, M. F.
Wholesome Childhood—Groves, E. R.

Dental Hygiene

- A Mouth Hygiene Program, Project for the School Year—Florida State Dental Society.
Children's Teeth, How to Use and Keep Them—American Academy of Periodontologists.

ADMINISTRATION

How to Build Sound Teeth—American Academy of Periodontologists.

Public Health Aspects of Dental Decay in Children—Franzen, Raymond.

Nutrition

Cultivating the Child's Appetite—Aldrich, C. A.

Emergency Food Relief and Child Health—U. S. Children's Bureau.

Family Food Budgets for the Use of Relief Agencies—U. S. Children's Bureau.

Feeding the Family—Rose, M. S.

Florida Fruits and Vegetables—Stennis, M. S.

Food, Health and Growth—Holt, L. E.

Nutrition—Massachusetts Department of Public Health.

Nutritional Status Measurement—Palmer, G. T.

Physical Measures of Growth and Nutrition—Franzen, Raymond.

Weighing School Children—Whitney, Anne.

What is Malnutrition—Roberts, L. J.

These books and pamphlets may be borrowed from the State Board of Health Library.

BUREAU OF PUBLIC HEALTH NURSING

Ruth E. Mettinger, R.N., Director

PRESCHOOL NURSING CARE

The school child has received most of the attention of the public health nurse during the past few years. This attention includes not only the physical inspection and correction of defects, but also promoting the protective inoculations which have been given by medical officers or private physicians. Important as this work is, it should not be permitted to take the entire time of the public health nurse to the neglect of the younger children who can benefit much more if the same amount of effort is given in their behalf.

It has been proven that the first six years of a child's life are the most important in the development of a healthy body. Approximately 60% of the children who die of diphtheria are under five; therefore, it is very evident that the nurse should stress the importance of diphtheria protection and the correct ways of living during the first year. At this time, the child makes its own appeal through

BUREAU OF PUBLIC HEALTH NURSING

its helplessness. Children do not drift toward the goal of sound health. The voyage should be carefully guided by the parents with the advice of the family physician.

Too many children reach the school gate with physical handicaps, such as defective eyesight, abnormal nose, throat, and ear conditions, diseased tonsils and adenoids, which defects should have been corrected during the preschool period. These conditions naturally retard the children in their physical and mental growth and are the most common causes for repeaters.

The teeth of the preschool child are of the first importance. Upon their proper growth and preservation depends the growth and shape of the jaws and mouth. If the baby teeth do not develop properly, there will not be room for the permanent teeth, and they are quite likely to be out of line. A well chosen mixed diet helps most in forming sound teeth. Hard food which requires chewing, such as toast, zwieback, crackers, should be given early. The habit of washing down solid food with a glass of water or milk is very bad, as it destroys the value of enforced chewing of solid food and prevents the proper exercise of the teeth, gums, and jaws. A suitable diet for an expectant mother is an important factor in the foundation for the teeth and skeleton of the unborn child.

The public health nurse should encourage those having the use of fertile land to improve the family health by producing their own vegetables and dairy products.

Fresh air is the first essential to life and growth; and sunshine is the second. Even in inclement weather it is better to have damp, fresh air than foul air. Due to the mildness of the Florida climate, children can have the benefit of the fresh air and sunshine the year around. The infant should be placed in the sunshine early in life, the first exposure not more than five minutes each day, increasing the time a few minutes daily. He should get a good coat of tan but do not let him burn. Sunshine is the greatest doctor the children have because it not only cures but prevents certain diseases.

Because of the close contact the nurse has with the parents in the home, she has an excellent opportunity to teach the foundations of health. She very often forms the connecting link between the doctor and the family. In the discussion of a paper on infant care, Dr. C. E. A. Winslow said that "above all it is the public health nurse who follows the case into the home and there on the spot, with the utensils and the conditions which the mother has at her disposal, she teaches the principles of the care of the baby in the most effective way. She is the final link in the chain which connects the scientific investigator in his laboratory with the child he is working to save. She is the messenger who brings the last word of

BUREAU OF PUBLIC HEALTH NURSING

science to the place where it really must be applied if our knowledge is to be effective."

The public health nurse should bear in mind that the preschool period offers opportunities which must not be lost. At this time, the child lays the foundation stone for his mental and physical life.

BUREAU OF COMMUNICABLE DISEASES

F. A. Brink, M.D., Director

FOMITES

There is an old idea that "emanations" capable of causing disease have a mysterious way of getting about through the air. This idea was well established in the minds of men and still has its adherents. After the discovery of disease-producing bacteria it was held by many that diseases were spread largely through the agency of clothing, bedding and any object or substance other than food. These materials were called fomes or fomites and many articles of value have been needlessly destroyed by burning after being used by a contagious disease patient. Houses even have been burned because germs were believed to lurk in them for years.

For a long time and up to about 1915 fumigation was the vogue. The fumes of sulphur, formalin, etc., are germicidal and were depended upon to render houses fit for occupancy after the recovery or death of patients having communicable diseases. This procedure did not prevent contagious diseases and we now know the reason is that most of them are transmitted by direct contact and by transfer of infectious secretions by coughing, sneezing, common drinking cups and other articles recently soiled by a patient or carrier.

Burning is rarely advised and then only for articles too worn or too much soiled to be of value. Fumigation has been abandoned by nearly all health departments. Soap and water are much more effective. Cyanide fumigation by skilled workers is useful for destroying animals (rats and insects).

Most of our success in the prevention of epidemics rests on the knowledge of (a) how the infection of any specific disease is transmitted, (b) which of the secretions contain the infection, (c) how to detect the specific organism, (d) how long the patient remains infectious, and, (e) in certain diseases, how to render susceptible persons temporarily or permanently immune.

A number of insect-borne diseases (notably yellow fever and plague) have been conquered and for the complete eradication of

BUREAU OF COMMUNICABLE DISEASES

malaria, dengue and other important diseases we have the necessary means and need only the impetus to make practical application of the knowledge we have.

TUBERCULOSIS

During June, Dr. Claxton held tuberculosis clinics at twelve points in South Florida. He examined 486 persons of whom 102 were found to have tuberculosis. In his monthly report he states that, "About half of these are suitable for sanatorium treatment. It is distressing to find persons with well-developed cases of tuberculosis in some of the smaller towns of Florida who are struggling along to keep their disease under control, mostly without success, and who could be improved or cured if proper sanatorium facilities were provided for proper bed rest, proper food and the necessary special treatment."

Florida might go on for years without making any provision for her consumptives but we believe the present interest in the sanatorium project will not decline until the task is finished.

Escambia County is working on a very promising plan and expects soon to have its own twenty-bed unit.

RED BUGS

(Harvest Mites or Chiggers)

Red bugs are the six-legged larvae of various species of the genus *Trombidium*. The adults resemble the ticks somewhat, have eight legs and are not parasitic. The larvae are more prevalent in the summer and fall months. They are plentiful in berry patches, weeds and tall grass. They crawl out to the ends of the leaves where they are brushed off by the clothing on which they cling and crawl until they find the skin. They enter the hair follicles and in many persons produce severe itching and red spots which disappear spontaneously in a few days.

The following precautions have been found useful:

1. Keep the grass about the home closely cut.
2. Keep out of the woods, weeds and bushes as much as possible during the warm months and especially avoid contact with shrubbery.
3. If it is necessary to go into infested areas the discomforts produced by these parasites may be averted to a considerable extent by dusting into the clothing and over the skin, flowers of sulphur.

BUREAU OF COMMUNICABLE DISEASES

which should be applied at least from the waist down. Since the waist line, the shoe tops and the hose supporters afford favorite points of invasion, particular attention should be given these.

4. Whether or not the sulphur has been applied one should upon returning from an infested area remove all clothing and take a bath of kerosene followed by soap and water or a strong soap and water bath alone, using tar soap or lava soap and scrubbing vigorously with a cloth.

5. The clothing worn in the woods should not again be worn for several days unless laundered or fumigated, shoes and all, in a tight container with carbon bisulphide.

6. After the red bugs have entered the hair follicles they may sometimes be removed with the point of a penknife. The application of simple home remedies will afford considerable relief. Carbolated vaseline or tincture of iodine may be applied.

READY FOR SCHOOL

More than the usual number of Florida children who enter school this year for the first time will be protected from diphtheria by the one-dose toxoid, alum precipitated. More than 200 FERA nurses in public health have been devoting a part of their time and attention to the preschool children, arranging conferences and clinics in which the little folks were inoculated, vaccinated and examined. Many of their physical defects have been recognized and many corrected. Diseased tonsils have been removed, dental work done, hookworm tests made and treatments administered under medical supervision.

The nurses have been asked to insist on sanitation to prevent hookworm disease and their efforts have borne fruit but there are still thousands of children playing on polluted ground, suffering from hookworm and other diseases, malaria, dental decay, infected tonsils and many other handicaps that could be cured or prevented. On the parents rests the direct responsibility for the health of the children, but all health workers and physicians have a duty to perform, that of enlightening these parents, convincing them of their duties toward their children, encouraging and aiding them in the performance of those duties. Let's coöperate to make the lovely boys and girls of Florida just a little more lovely. A healthy child is a happy child and a delight to all mankind.

BUREAU OF ENGINEERING**Louva G. Lenert, Director****THE SPICE OF LIFE**

A sample of water is received in a laboratory for chemical analysis. It is carried through a maze of processes and the results are finally typed on less than a half-sheet of paper, leaving enough space for ample remarks on the same half-sheet. Described simply, it is a chemical analysis of the sample of water submitted. To explain in any other fashion might require an hour's steady resumé of the processes to which the sample was subjected.

Periodically our equilibrium is upset by a very simple question, innocently propounded, "What do you do?" To receive an intelligent reply one must be prepared to listen to a lengthy dissertation on the work of environmental sanitation. That is the report usually given, but unless it is analyzed by one familiar with public health activities it means little. The week just passed is probably a normal one for 1934. Suppose an analysis is requested of the grist that comes to this mill.

Every public water supply in the State submits samples to the water laboratory for periodic checking on its bacterial quality. Private, school, camp and other supplies are also checked by bacterial examination upon request. All bottled waters sold within the State are checked by the laboratory and actual field investigations of the supply, equipment and sanitary methods are made before a permit is issued for its sale. Each sample is submitted to the most rigid approved bacteriological methods. In the three weeks just passed 572 such samples have been examined and the result of each analysis is reported to the owner or sender. Just a matter of routine, one might say.

While waiting for more samples to come other routine is handled. The State Health Officer has issued a general notice that schools in Florida will not be permitted to operate during the coming year without proper sanitary facilities. There are 2,000 to 2,500 schools. Each one must be inspected, reported on, and a statement of improvements required must be sent to the county school superintendents. Where finances are short, assistance is given in drawing up projects for FERA aid, but in this matter of health preservation responsibility rests on local school authorities. To date, only one school in thirty has been reported in satisfactory condition. Reinspections of all failing to qualify will be made and follow-ups will no doubt be necessary in many instances.

Dengue fever appears in epidemic form in South Florida. To check its spread over the entire South it is necessary to create a "no mosquito land" so that it will die a natural death. Communities must be instructed on the peculiarities of the *Aedes aegypti* mosquito re-

BUREAU OF ENGINEERING

sponsible for its transmission. All available forces of the entire department are massed on this work.

Those half-gallon bottles you see in cases are merely a coöperative work being carried on with the University of Florida in the examination of Florida waters for Fluorides, the substance which causes mottled enamel in teeth. Samples are collected as the field force goes from place to place covering the entire State. A major project carried on as routine.

"You don't mind my watching?" A visitor stands over the draftsman who has just completed a set of large-scale drawings of the entire east coast of Florida to be used in salt marsh mosquito control work, a set of county maps of uniform scale on which pertinent data on public health work is maintained, a plan for a sewage disposal plant for a State institution of 5,000 souls, a new set of privy plans and is now working on condemned shellfish areas, where it has been found by field surveys that oysters and clams taken from those waters are unsafe for human consumption.

A justly indignant suburban resident calls in to complain of the dumping of eight or ten truck loads of green bones near his premises, producing millions of screw-worms and an unbearable stench.

The daily press carries news of meat canneries to be opened in all sections of the State. Interest in these is aroused because their operation must be in line with regulations of the Board. This week a list of such plants cannot be furnished by the FERA, though operation is to begin almost immediately. Truly a difficult task for the inspector to make an inspection to justify a permit for operation.

The Franklin County oyster season opens September 1. Oyster houses opening on that date must be inspected and certified during the next ten days. Along with school work, Dengue control, and water collections, oyster plant inspections now become routine work for the next six months. Eat only certified oysters. Others may prove dangerous. You will find certified oysters sold by all reputable dealers and the mark of identification is the certificate number on the original container from which they should be served.

It seems rather hard to put a sheriff in his own jail, but it looks as if it will have to be done if he doesn't get it cleaned up. Even a hog pen must be kept decently clean, and prisoners merit at least equal treatment. Yes, sheriff, clean up or thirty days in your own pig sty.

Five cow dairies? Surely they must be kept clean and so must the larger ones, but the milk products law doesn't include the former. The only workable milk sanitation program is local control through the Standard Ordinance and the accompanying program in which

BUREAU OF ENGINEERING

assistance is rendered any community in setting up an enforcement program and later in rating all cities in terms of the United States Public Health Service Standard Milk Ordinance. Ratings above 90% are published in Public Health Reports. Unfortunately, no Florida cities have attained this status in ratings made to date. Personnel cuts have temporarily eliminated the milk and dairy specialist to whom this was assigned and no ratings have been made during the past twelve months. Routine must be carried on though, and the Milk Control Board states that unless dairies are in line with State Board of Health regulations they will not be licensed, so there will have to be found time for inspection of those dairies that wish to continue in business.

It is getting late for swimming in the North but in Florida it goes on during the entire year. The three requests for swimming pool permits are all from South Florida. No, they haven't complied with the law which requires the submission of plans before construction. They have worked out a combination of water tank and swimming hole with the FERA, without consultation, and have to revamp the plant in order to get by. It costs money to make changes, but as children are the principal patrons it must be handled as efficiently as possible.

The director of the transient camp at Camp Foster reports more than 800 occupants. "Tourist" business is beginning early, which reminds us of the necessity of making more than 225 inspections of tourist camps for permits issued for the 1934-35 season, present permits all expiring on October 1.

The space in this publication allotted to the Bureau is already overrun and the question, "What do you do," has not been answered fully. The reader must use his imagination and cover such subjects as salt marsh mosquito control, privy building in the prevention of hookworm disease, drainage and screening for control of malaria, rabid dog investigations and follow-up control work, assistance in getting PWA loans for water works and sewerage construction, drainage well permits, investigation of drinking water used by common carriers, nuisances of all descriptions and—the list may be continued indefinitely.

The work of the Bureau requires long hours and constant application, but the personnel of few organizations functions more enthusiastically. There is no monotony. Variety, it has been said, is the spice of life. There is plenty of variety here to satisfy the most critical.

BUREAU OF LABORATORIES**Paul Eaton, M.D., D.P.H., Director****PERSONAL LIBERTY**

If there were but one person in the world he would have complete personal liberty, but the introduction of a second person would circumscribe the liberties of the first one to a certain slight extent, and each subsequent addition to the population would effect a further limitation on the liberties of all.

With the gathering into cities of large numbers of people, limitations of personal liberty must of necessity become extreme. The dweller in New York City or Jacksonville finds that there are hundreds of things he must not do because the exercise of his personal liberty interferes with the welfare or comfort of some other person.

But the strangest limitation on personal liberty is the limitation on what one may do, or allow to happen, to one's self. The sole inhabitant of the world might attempt suicide at any time, but the citizen of a civilized community must not. There would be nobody to care if Mr. Lonesome had any or all of the infectious diseases, but the citizen of Jacksonville or Tampa who contracts smallpox becomes a public nuisance. The child who contracts diphtheria becomes a menace to all other children.

But there is a vast difference in the way in which different people and different communities react to the same stimulus. Take for example a county of a thousand square miles populated by eighteen persons, and let one of these persons get smallpox. Straightway the other seventeen set up a shotgun quarantine with great damage to public morale and private business. Let the same thing occur in Paris or London and, beyond putting up a placard and vaccinating contacts, the authorities pay no more attention to it than if it were a toothache.

The moral of this is that those who have the greatest experience with and knowledge of smallpox have the least fear of it because they know what vaccination will do to it.

BUREAU OF LABORATORIES

SUMMARY OF WORK DONE IN THE LABORATORIES OF
THE STATE BOARD OF HEALTH DURING THE
MONTH OF JULY, 1934

	Jacksonville	Tampa	Pensacola	Miami	Tallahassee	Total
Animal Parasites.....	2159	875	286	186	93	3599
Diphtheria	906	286	55	136	52	1435
Typhoid	1219	288	77	79	46	1709
Malaria	1841	408	109	70	277	2705
Rabies	17	6	—	2	—	25
Tuberculosis	324	112	37	47	36	556
Gonorrhea	838	303	76	178	62	1457
Kahn	5753	2199	412	1523	371	10258
Water	—	49	—	258	—	307
Milk	218	423	190	547	72	1450
Miscellaneous	511	27	225	313	7	1083
	13786	4976	1467	3339	1016	24584
Specimen containers distributed.....						8281

BIOLOGICAL PRODUCTS DISTRIBUTED

Diphtheria Antitoxin.....	10,000 units	46 Packages
	5,000 units	10 Packages
Schick.....		1960 Tests
Toxoid.....		1834 C. C.
Typhoid Vaccine.....		2744 Treatments
Vaccine Virus.....		1650 Capillaries
Tetanus Antitoxin.....	1,500 units	8 Packages
Antirabic Virus.....		17 Treatments

CORRECTED REPORT FOR JUNE, 1934

	Jacksonville	Tampa	Pensacola	Miami	Tallahassee	Total
Animal Parasites.....	2042	660	337	213	61	3313
Diphtheria	543	317	53	186	16	1715
Typhoid	1120	277	61	137	34	1629
Malaria	1333	445	87	65	266	2196
Tuberculosis	298	94	51	64	14	521
Gonorrhea	819	301	68	157	75	1720
Kahn	5410	1619	525	1357	374	9285
Rabies	20	2	—	2	—	24
Water	—	53	—	214	—	267
Milk	211	372	570	564	66	1783
Miscellaneous	310	43	176	355	4	888
	12106	4183	1928	3314	910	22441

BUREAU OF VITAL STATISTICS

Stewart G. Thompson, D.P.H., Director

MORTALITY, CERTAIN DISEASES — 1934



Provisional figures for deaths from certain diseases, first six months of 1934, as compared with the same period of the previous year are given below. By comparison of the number of deaths caused by the diseases listed, it is possible to visualize the mortality trend in 1934 as compared with the first half

of the previous year for some of the most important preventable diseases.

Deaths from Typhoid, by Months, Florida, 1934, as Compared with the Previous Year

Year	Jan.	Feb.	Mar.	Apr.	May	June	Total	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1934*	5	3	3	5	4	4	24							
1933	3	5	10	6	7	5	36	4	5	4	3	5	6	63

Deaths from Malaria, by Months, Florida, 1934, as Compared with the Previous Year

Year	Jan.	Feb.	Mar.	Apr.	May	June	Total	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1934*	27	9	20	14	14	19	103							
1933	9	9	11	9	13	19	70	42	59	65	56	55	26	373

Deaths from Diphtheria, by Months, Florida, 1934, as Compared with the Previous Year

Year	Jan.	Feb.	Mar.	Apr.	May	June	Total	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1934*	7	4	3	4	7	3	28							
1933	6	5	6	4	5	3	29	3	4	2	7	7	4	56

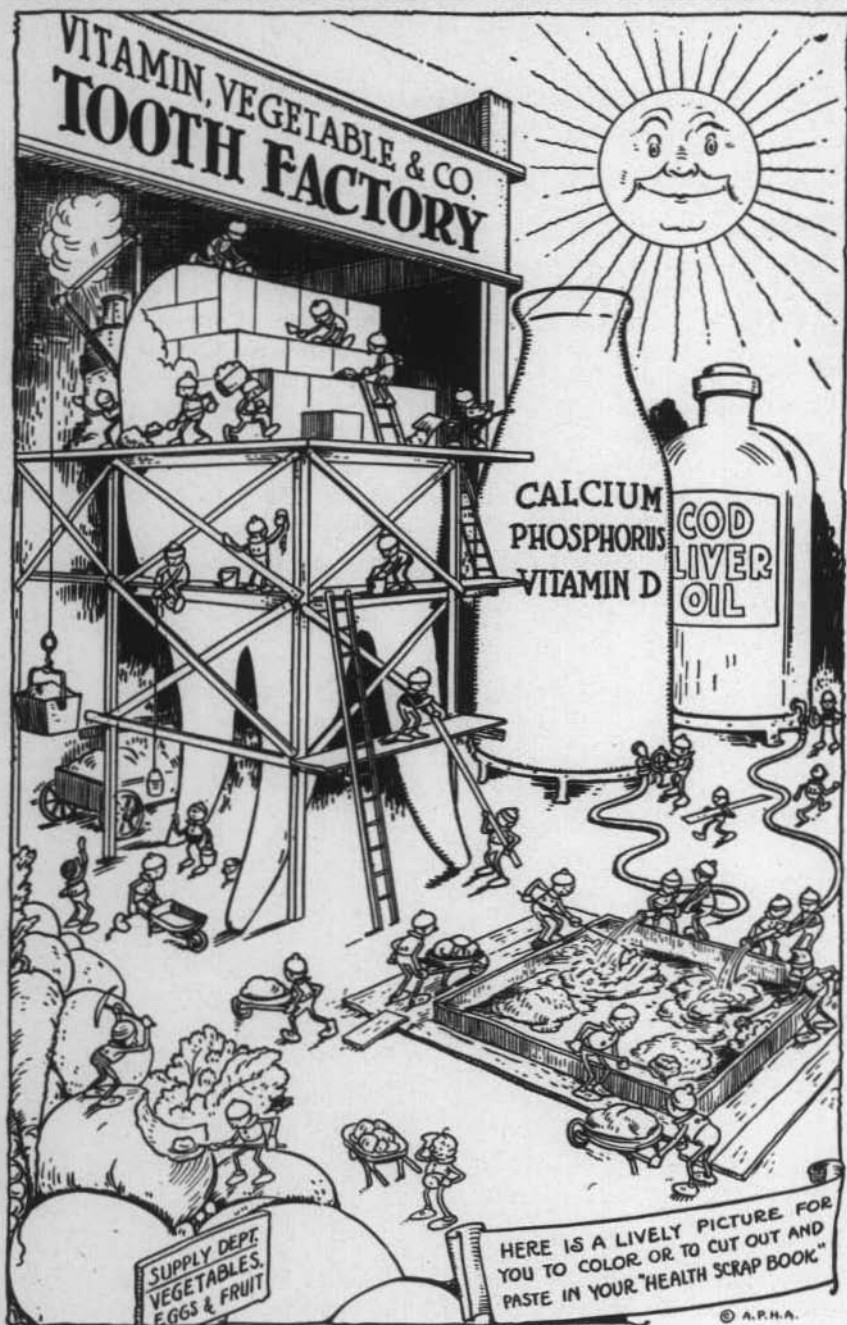
Deaths from Pellagra, by Months, Florida, 1934, as Compared with the Previous Year

Year	Jan.	Feb.	Mar.	Apr.	May	June	Total	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1934*	20	19	21	12	22	26	120							
1933	11	10	10	16	23	21	91	22	17	12	14	22	15	193

Deaths from Diseases of Pregnancy, Childbirth and the Puerperal State, by Months, Florida, 1934, as Compared with the Previous Year

Year	Jan.	Feb.	Mar.	Apr.	May	June	Total	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1934*	15	15	21	16	12	11	90							
1933	27	21	23	24	18	24	137	21	21	23	34	24	25	285

*Provisional figures.



HUMAN LIFE IS THE STATE'S GREATEST ASSET

FLORIDA



HEALTH NOTES

OFFICIAL MONTHLY BULLETIN

ESTABLISHED JULY, 1892

STATE BOARD OF HEALTH
JACKSONVILLE, FLORIDA

Entered as Second Class Matter, October 27, 1921

at the Postoffice at Jacksonville, Florida, Under the Act of August 24, 1912

This Bulletin will be sent to any address in the State free of charge.

Vol. 26

OCTOBER, 1934

No. 10

Edited by

STEWART G. THOMPSON, D. P. H., Member
American Medical Editors' and Authors' Assn.

ARTICLES

HOT DOGS—*Eaton*

DOG FLIES—*Lenert*

CONGENITAL SYPHILIS—*Brink*

MIDWIVES' INSTITUTE—*Mettinger*

MISSED MOSQUITO PRODUCERS—*Hanson*

MATERNAL MORTALITY—CITIES, 1933—*Thompson*

HENRY HANSON, M. D., STATE HEALTH OFFICER

Also Executive Officer and Secretary of Board

BOARD MEMBERSN. A. Baltzell, M. D., Pres.
MariannaHarry Dash Johnson, M. D.
Daytona BeachR. L. Hughes, M. D.
Bartow**STATE HEALTH OFFICER**

Also Executive Officer and Secretary of Board

Henry Hanson, M. D.

BUREAUS AT JACKSONVILLE**DIRECTORS**

Laboratories.....	Paul Eaton, M. D., D. P. H.
*Vital Statistics.....	Stewart G. Thompson, D. P. H.
Communicable Diseases.....	F. A. Brink, M. D.
Engineering.....	Louva G. Lenert
Public Health Nursing.....	Ruth E. Mettinger, R. N.
Accounting.....	G. Wilson Baltzell
Librarian.....	Elizabeth Bohnenberger
*Registration Inspector.....	Anna C. Emmons
Drug Store Inspector.....	M. H. Doss
Assistant Drug Store Inspector.....	Frank S. Castor

LABORATORIES

Jacksonville.....	Pearl Griffith, B. E.
Miami.....	E. R. Powell
Pensacola.....	Johnette McCormick
Tallahassee.....	Estelle Bryan
Tampa.....	H. D. Venters, B. S.

MEDICAL OFFICERS

DeFuniak Springs.....	C. W. McDonald, M. D.
Inverness.....	Leland H. Dame, M. D.
Jacksonville.....	Thos. E. Morgan, M. D.
Jacksonville.....	W. A. Claxton, M. D.*
Tallahassee.....	H. A. McClure, M. D.
Tampa.....	C. W. Pease, M. D.

*(And Tuberculosis Clinician)

DISTRICT SANITARY OFFICERS

Milton.....	T. S. Kennedy, M. D.
Ocala.....	C. A. Holloway
Orlando.....	Russell Broughman
West Palm Beach.....	S. D. Macready
On "FERA" Duty.....	Fred A. Safay

PUBLIC HEALTH NURSES

Jacksonville.....	Joyce Ely, R. N. (Asst. Director)
Ft. Pierce.....	Annie Gabriel, R. N.
Jacksonville.....	Johanna L. Sogaard, R. N.
Marianna.....	Lalla Mary Goggans, R. N.
Tampa.....	Julia O. Graves, R. N.

MALARIA RESEARCH

Tallahassee.....	Mark F. Boyd, M. D. (Rockefeller Foundation)
------------------	---

MALARIA CONTROL STUDIES

Jacksonville.....	T. H. D. Griffiths, M. D. (U. S. Public Health Service)
-------------------	--

CONSULTANT IN ENTOMOLOGY

Orlando.....	W. V. King, Ph. D. (U. S. Bureau Entomology)
--------------	---

DIRECTORS FULL TIME COUNTY HEALTH UNITS

Tallahassee, Leon County.....	L. J. Graves, M. D.
Pensacola, Escambia County.....	W. A. McPhaul, M. D.

ADMINISTRATION**Henry Hanson, M.D., State Health Officer****MISSED MOSQUITO PRODUCERS**

The following article by Dr. W. V. King, our Consultant in Entomology, invites your attention to a type of "container" which probably is often overlooked by people doing mosquito control work. It happens that this study was made in Orlando where the Bureau of Entomology has its laboratories.

The same kind and amount of mosquito production will be found in any city where similar catch basin conditions prevail. All cities should carefully check these basins and at the same time be alert to the discovery of any other type of container producing mosquitoes which will prolong the epidemic of dengue fever.

AEDES AEGYPTI BREEDING IN CATCH BASINS**W. V. King, Ph.D., United States Bureau of Entomology**

In connection with the dengue fever control campaigns throughout the State, the question has arisen as to the importance of the storm-sewer catch basins in the production of the dengue fever mosquito. A hasty perusal of the available literature did not disclose any specific information on the subject, and an examination of a number of these receptacles in one section of the City of Orlando has recently been made by Mr. McNeel and the writer. Much more *aegypti* breeding was found than had been anticipated. Out of 20 basins in which dippings were made, larvae and pupae of this species were found in 10, and in one or two where larvae were not obtained, adults were noticed on the walls or flying about. In the basins containing larvae, the number taken varied from a few to several hundred each. Since the larvae of this species have the habit of dropping to the bottom of the water as soon as disturbed, their collection in such locations is more or less uncertain, particularly where the water is deep, and the taking of even a few under these conditions is usually indicative of much heavier breeding.

The catch basins examined were for the most part about three feet long by two and a half feet wide and were lined with bricks. All of them contained water, varying in depth from a few inches to more than two feet, depending upon the amount of accumulated dirt and trash, and varying also as to the state of pollution. Practically all of them, of course, contained hundreds of *Culex* larvae, most of which were the common house mosquito, *Culex quinquefasciatus*.

Because catch basins have been relegated more or less to the doubtful class of *aegypti* breeding places they have undoubtedly been slighted or even entirely overlooked in the early part of the control work. The above results, however, would indicate that they should be regarded as of primary importance and handled accordingly.

ADMINISTRATION

Oils of various kinds may be used in the treatment of the catch basins. In cities and the larger towns, a motor truck and some form of power sprayer should be provided in order to cover the territory rapidly. Crankcase oil when properly strained (through 30 to 40 mesh wire) and diluted with kerosene or other light oil has proven satisfactory and will last for two or three weeks. Since most of the communities have no provision for the handling or storage of such oil, the purchase of a medium grade distillate, having a Baume reading of 32° or higher, is to be recommended under the present circumstances. Repeating the treatments at intervals of two weeks is suggested unless the basins have been flushed in the meantime by storm water, when the application should be repeated within a week. If a heavy oil is used and an interval longer than two weeks is considered, a very careful check should be kept on these breeding places to observe the reappearance of the larvae.

BUREAU OF PUBLIC HEALTH NURSING

Ruth E. Mettinger, R.N., Director

MIDWIVES' INSTITUTE

We are fortunate in having in the Division of Public Health Nursing as Supervisor of Midwives, Miss Joyce Ely, who took special training in this particular branch of work and is well fitted to train and supervise midwives.

During the past year Tampa, St. Augustine and Tallahassee Institutes have been conducted with such success that another has just been planned and carried out at Tallahassee under the direction of Miss Ely who has by special request submitted the following account of the training course:

There is Something About an Institute

Paraphrasing a line of a recent song hit, "There is something about an Institute that is fine, fine, fine." The second annual Institute for the midwives of North and West Florida has just drawn to a most successful close. It was held, as last year, at the Florida Agricultural and Mechanical College, Tallahassee, where President J. R. E. Lee, because of his great desire to better the health conditions of his race, again opened the doors of his class rooms, hospital and dormitories in order that the midwives might have the advantage of comfortable class rooms, up-to-date equipment, facilities for health examinations, and ideal living conditions on the beautiful rolling campus.

The Institute was held for two weeks, August 11-24, 1934. The first week the licensed registered midwives of Leon County and the

BUREAU OF PUBLIC HEALTH NURSING

counties west to the Alabama line were invited to attend. 125 enrolled. The second week, 107 licensed registered midwives from Jefferson County east to the ocean attended.

The same course of instruction was given each week and included classes in the following subjects: The Midwife Bag, Home Nursing, Prenatal Care, Conduct of Delivery, Postnatal Care, and Infant Care. In addition to the regular class schedule, special lectures on obstetrics, nutrition, sanitation, health, communicable diseases and immunization were given by local physicians, dentists, sanitary officers, home demonstration agent and nurses. Twelve public health nurses were full time instructors and six more were responsible for the smooth running of all activities.

Fifty-nine visitors registered with us during the two weeks. Forty of these were FERA nurses in public health work, whose average stay was two days each. Miss Margaret Murphy, Nurse-Midwife of the Alabama State Health Department, visited one entire week at the Institute.

Improvements in the midwives were noted in many ways. The equipment was cleaner, in fact 96% of the bags were clean, and they were more complete than last year. 25% of the midwives had clean, complete bags on first inspection.

The average number of baby beds and baby trays secured through the efforts of the midwives was three for each midwife. One midwife had been instrumental in getting twenty-two mothers to provide baby beds and baby trays for the new baby.

All midwives had used during the past year newspaper pads and pans for the protection of the bed and floor during delivery. Not one midwife has delivered a woman on the floor during the past year, a practice which was rather common in the past. More patients had been prepared for delivery during this past year than previously. More midwives had arrived in time to conduct delivery, though many said they were called so late that all they could do was to cut the cord and fix up the mother and baby.

Approximately three-fourths of the midwives paid their own expenses this year. The Woman's Clubs and County Commissioners and other interested individuals paid the expenses of those who were unable to raise the necessary funds.

In addition to our demonstration material for teaching the midwives this year we had a splendid exhibit made by the FERA workers of Manatee and Polk Counties. This exhibit was designed to show the midwives how cheaply baby beds and convenient costumes could be made. There were two baby beds made of palmetto strips woven together and made at a cost of 4c for the screws which held it in place. The well-made little mattress was fashioned from

BUREAU OF PUBLIC HEALTH NURSING

a sugar sack and the native Spanish moss. The practical little costumer was made from an empty cheese box held in place with three heavy palmetto stems. Four cents for screws was the only cost attached to this article.

That the midwives are eager to believe and to put into practice the things they are taught is well illustrated by the following letter recently written to the State Health Officer:

"Dear Dr. ———. I am now sending to you again for medicines for ———, a pregnancy Mother, her blood reports Positive-3, of which I am her midwife and this is her first baby. I had her blood tested and the first time it got broken in transit and then I had to have it again and that same Dr. ——— said she did not need one, but I knew the law and she agreed for me to select a doctor that would give the blood test so I got Dr. ——— to take it and it is now a little late. Please send me the amount and medicine for her. Will oblige,

————— Midwife."

The midwives enjoyed their week "at college." They enjoyed meeting those in the same work from other counties. One midwife from the central part of the State, who had recently attended an Institute in her district asked for special permission to come to this one, "because she learned so much at the first one." They enjoyed the pleasant living conditions, the spacious dining hall, the well-cooked food served on snowy white cloths with shining silver, the morning devotions, the singing, the moving pictures; in fact, "there is something about an Institute that is fine, fine, fine."

BUREAU OF ENGINEERING

Louva G. Lenert, Director

"DOG FLIES"

Just why they should be called "dog flies" we do not know. It is true that during the season when they are at their highest prevalence these flies make a dog's life truly miserable. In the continuous battle to beat them off dogs scratch the skin off large patches of the ears and at times tear gashes into the flesh.

Dogs are not, however, the only sufferers from this blood-sucking fly. Any traveler along the new Gulf Coast highway in Northwest Florida at this season, if a north wind is blowing, will observe many cattle far out into salt water bays and bayous, where they will stand from daylight until dark, sometimes with water almost covering their backs. One might conclude that it was an effort to keep cool, but they are protecting themselves from "dog flies."

BUREAU OF ENGINEERING

Stockmen claim that in a bad season cattle spend so much time away from the range in trying to keep away from these biting flies that they grow poor before the winter and are then unable to carry through the season when grazing is poor.

Dairymen have reported a drop in milk production in their herds from twenty to fifty per cent during the "dog fly" season. A drop of twenty per cent within a few days after the first heavy crop of "dog flies" puts in its appearance is very commonly reported. This fall in production is rarely recovered after the flies have disappeared, except through freshening of cows in the herd.

Horses unaccustomed to this nuisance have been known to run away, breaking their bonds as if they were wild, unbroken animals. A riding school in this vicinity usually ceases operation during the "dog fly season," the horses being sent into the interior.

Visitors to the bathing beaches and summer cottages along this coast usually have at least a month or six weeks cut off the most delightful part of the season because of this pest, which seems to delight in feeding on exposed parts of bathers when they appear above the surface of the water.

In order to make this picture complete it should be mentioned that during heavy infestations these flies have been known to turn a white house to a dingy gray on the leeward side, with their excretions. With a land breeze fishermen as far as fifteen miles from shore find it almost impossible to carry on fishing operations.

This is not a peculiar uncommon fly, but rather a common fly with peculiar habits in this section. The above facts are mentioned for the purpose of setting forth the importance of a common insect under peculiar conditions. It presents no public health aspects which make it a problem of health officials, but because of its being such an intolerable nuisance it deserves the same consideration which is given to other problems which involve the comfort of human beings. There being no other agency the responsibility of hunting a remedy was accepted by the State Board of Health.

Accordingly, the services of Dr. W. V. King, Senior Entomologist, Bureau of Entomology, United States Department of Agriculture, and Consultant in Entomology of the Florida State Board of Health, stationed in Orlando, was called on to help arrive at a solution.

The "dog fly" is none other than the common stable fly known to entomologists as *Stomoxys calcitrans*. Under normal conditions it may be found almost anywhere in small numbers and is so similar in appearance as to be known sometimes as the biting house fly.

Along the Gulf Coast of Florida from the mouth of the Wakulla

BUREAU OF ENGINEERING

River to Pensacola this fly appears in swarms, beginning in August or September and continuing until the advent of cold weather. They put in their mass appearance suddenly under certain wind conditions. Along the water fronts they are very inactive as long as there is a breeze from the Gulf, but immediately after a land breeze appears their activity becomes very marked. This condition is not so apparent in the wooded sections inland. Their density or number decreases very rapidly as one moves from the coast, and twenty miles inland they are practically unknown.

The question before the entomologist is how to blend the above facts with known habits of the insect. Dr. King has very diligently searched the area for an answer to the problem and though only a beginning has been secured, some definite information has been obtained. Egg-laying, larval development and pupae were all observed in a grass which drifts upon the beach from the Gulf, known to fishermen as June-grass. Egg-laying was noted in other areas but no larval development has been found to date.

The grass in question drifts from the Gulf to the beaches from the end of June through July and August in large bunches and is cast out by the surf. These preliminary findings are the only facts known as yet regarding their breeding, and hasty conclusions must not be drawn, but they most nearly fit the seasonal prevalence of this pest. Many theories have been advanced, some of which are blasted by the fact that like other insects, the "dog fly" must pass through the egg, larval, and pupal stages before developing into the adult fly, and each of these stages requires certain conditions and time for its fulfilment.

This year the "season" appears to be one of relatively slight infestation and apparently there will be no great crop. Some local concentrated emergencies have taken place, but no general infestation has occurred.

Trapping of stable flies has never been successful except with live bait and is not recommended by those familiar with the insect. Flies drawn to traps baited with dead flesh usually consist of house flies and those commonly known as blow flies and only scattering handfuls of stable flies have thus been caught.

The information given above is of such acute interest in the area mentioned that it was thought advisable to make this preliminary announcement. Studies will continue and definite control measures will be experimented upon with the idea of making definite recommendations for the future. It is not possible to eradicate the pest, but it is sincerely hoped that the future developments will point to some definite control measures to reduce their incidence to the minimum.

BUREAU OF COMMUNICABLE DISEASES**F. A. Brink, M.D., Director****CONGENITAL SYPHILIS**

Syphilis, if progress is to be made in its treatment and control, must be regarded as just another infectious, communicable disease. It should be studied and frankly discussed for the better it is understood the better it will be avoided and treated. More and more the venereal diseases are being studied outside medical circles; the prudish attitude toward them is, happily, vanishing by degrees. Our knowledge of the importance of syphilis as a public health problem; the extent of harm wrought by it; the number of persons infected; is increasing steadily. Accuracy of diagnosis and efficiency of treatment are now much greater than 10 or 20 years ago.

Syphilis in the newborn children of syphilitic parents (congenital syphilis) can be prevented in 90% to 95% of the cases by adequate treatment of syphilitic pregnant women. So variable in its manifestations and so insidious is syphilis that every prospective mother should be carefully examined and blood tested early in pregnancy or before conception. Early diagnosis and treatment will remove the most common cause of miscarriage, stillbirth and death of newborn infants.

Nearly 10% of the women going to prenatal clinics are syphilitic. Physicians in private practice report a lower per cent but still, even among the well-to-do, the disease is common enough to warrant testing the blood of every pregnant woman. The physician should make it a routine thing and the women should expect—they should demand it. Let it be known that the collection of blood from a vein is not difficult or dangerous and it is almost painless.

So sad is the plight of the child with congenital syphilis that no parent, no physician would willingly be responsible for it either through ignorance or neglect.

The treatment of a pregnant woman for syphilis offers no insuperable difficulty. The earlier the disease is discovered and treated, the greater the assurance of a healthy child. Even late in pregnancy a routine blood test is of value because it may determine the treatment of the child who may be born syphilitic.

In order that there may be a more general understanding of its seriousness, further study of this important problem by lay groups is recommended and urged. In many communities there are practising physicians who would prepare and deliver before your club a frank discussion of this important question. Much helpful material for laymen and physicians can be had from the United States Public Health Service, Washington, D. C., The American Social Hygiene Association, 450 Seventh Avenue, New York, N. Y., The National

BUREAU OF COMMUNICABLE DISEASES

Health Council, 50 West Fiftieth Street, New York, N. Y., and from the State Board of Health.

This subject is one to which physicians must give serious thought in order to meet fully their obligations to their patients. Medical journals and special study courses offer excellent opportunity to those who would improve their technique. One medical society meeting a year might well be devoted to the study of this subject.

One important function of the Florida State Board of Health is the licensing, registering and training of midwives and one thing that is greatly stressed by our nurses who teach at the midwives' classes and institutes is the importance of a medical examination, including a blood test, for the women they are later to attend in childbirth.

CONGENITAL SYPHILIS IS PREVENTABLE

IODIZED SALT

A communication from an eminent dermatologist to the State Board of Health calls attention to the occasional occurrence of a skin eruption seemingly due directly or indirectly to iodized salt. The addition of iodide of potash to table salt has become quite general. The purpose is to prevent endemic goiter, a disease rather common in young people of certain regions where the water and locally produced foods do not contain enough iodine to supply the needs of the human body. Florida, having a soil of relatively recent geological formation and almost surrounded with salt sea water, is abundantly supplied with iodine in its fruits, vegetables and sea foods; hence, the addition of iodine to the table salt is believed to be unnecessary. It may even do harm by sensitizing a few persons to iodine salts and finally producing an eruption; also in a few individuals, by stimulating the thyroid tissue, thus producing other serious changes and activities in that important gland.

The purchase of salt to which no iodide has been added therefore seems advisable.

BUREAU OF LABORATORIES

Paul Eaton, M.D., D.P.H., Director

"HOT DOGS"

One often hears it said that "you can't change human nature." Sometimes this is expanded to "you can't change the habits of a nation over night."

While this is true, it is also true that the habits of a nation may be changed in short order. Witness the way in which we have come to depend on the telegraph and telephone.

BUREAU OF LABORATORIES

But a most effective witness to a nation-wide change of habit comes to us from the Century of Progress and the habit that has been changed is the habit of walking. There are many of us who can recall the Columbian Exposition in Chicago in 1893 even if we didn't visit it. More can remember the expositions in St. Louis, Buffalo and San Francisco.

But all these shows put together did not provide as much wailing over "tired and sore feet" as have the two sessions of the Century of Progress Exposition, and the reason is not far to seek. The automobile has weaned us away from the habit of walking.

SUMMARY OF WORK DONE IN THE LABORATORIES OF
THE STATE BOARD OF HEALTH DURING THE
MONTH OF AUGUST, 1934

	Jacksonville	Tampa	Pensacola	Miami	Tallahassee	Total
Animal Parasites	3057	1585	302	183	212	5339
Diphtheria	736	489	54	120	34	1433
Typhoid	1430	284	66	71	33	1884
Malaria	3239	438	105	45	319	4146
Rabies	27			2		29
Tuberculosis	298	177	78	34	26	613
Gonorrhea	863	306	82	173	80	1504
Kahn	6256	1942	483	1208	572	10461
Water		50		210		260
Milk	364	322	180	458	57	1381
Miscellaneous	604	43	196	238	8	1089
	16874	5636	1546	2742	1341	28139

Specimen containers distributed..... 10227

BIOLOGICAL PRODUCTS DISTRIBUTED

Diphtheria Antitoxin	10,000 units	73 Packages
	5,000 units	35 Packages
Schick		400 Tests
Toxoid		1376 C. C.
Typhoid Vaccine		2748 Treatments
Vaccine Virus		1120 Capillaries
Tetanus Antitoxin	1,500 units	7 Packages
Antirabic Virus		13 Treatments

ALL REQUESTS FOR BIOLOGICAL PRODUCTS SHOULD
BE DIRECTED TO THE STATE LABORATORY
STATE BOARD OF HEALTH
JACKSONVILLE, FLORIDA

BUREAU OF VITAL STATISTICS

Stewart G. Thompson, D.P.H., Director

Deaths from Diseases of Pregnancy, Childbirth and Puerperal State,
Recorded, Resident and Rates per 1,000 Live Births

By Color, By Cities, Florida, 1933

Cities 100,000 and Over Population

CITIES	Maternal Deaths	Per 1,000 Births	White M. Deaths	Per 1,000 Births	Col. M. Deaths	Per 1,000 Births
Jacksonville						
Recorded.....	27	11.0	18	10.9	9	11.1
Resident.....	21	9.3	13	8.8	8	10.2
Miami						
Recorded.....	14	8.3	10	8.2	4	8.7
Resident.....	11	6.8	7	6.0	4	8.8
Tampa						
Recorded.....	21	13.2	12	9.2	9	31.3
Resident.....	14	9.4	6	5.0	8	28.0

Cities 10,000 to 100,000 Population

CITIES	Maternal Deaths	Per 1,000 Births	White Deaths	Per 1,000 Births	Col. M. Deaths	Per 1,000 Births
Daytona Beach						
Recorded.....	1	3.3	1	4.6	0	....
Resident.....	1	3.6	1	5.2	0	....
Ft. Lauderdale						
Recorded.....	2	11.0	0	....	2	33.3
Resident.....	1	6.0	0	....	1	16.4
Gainesville						
Recorded.....	4	15.6	1	7.0	3	26.3
Resident.....	4	17.5	1	8.5	3	27.3
Key West						
Recorded.....	1	5.1	0	....	1	22.2
Resident.....	1	5.1	0	....	1	21.7
Lakeland						
Recorded.....	4	11.1	2	6.8	2	30.8
Resident.....	4	11.7	2	7.2	2	30.8
Orlando						
Recorded.....	4	8.1	3	7.7	1	9.4
Resident.....	2	4.6	1	3.0	1	9.4
Pensacola						
Recorded.....	9	14.5	6	12.6	3	20.7
Resident.....	6	10.1	4	8.9	2	13.8
St. Augustine						
Recorded.....	2	8.2	0	....	2	32.8
Resident.....	2	9.8	0	....	2	33.9
St. Petersburg						
Recorded.....	4	7.6	0	....	4	28.8
Resident.....	3	5.9	0	....	3	23.1
Sanford						
Recorded.....	2	10.8	0	....	2	22.5
Resident.....	2	10.9	0	....	2	22.2

BUREAU OF VITAL STATISTICS

Cities 10,000 to 100,000 Population—(Continued)

CITIES	Maternal Deaths	Per 1,000 Births	White M. Deaths	Per 1,000 Births	Col. M. Deaths	Per 1,000 Births
Tallahassee						
Recorded	1	4.7	0	.....	1	8.8
Resident	0	.....	0	.....	0	.....
West Palm Beach						
Recorded	10	25.1	6	22.7	4	29.9
Resident	8	22.2	5	22.1	3	22.4

Cities 5,000 to 10,000 Population

CITIES	Maternal Deaths	Per 1,000 Births	White M. Deaths	Per 1,000 Births	Col. M. Deaths	Per 1,000 Births
Bartow						
Recorded	6	45.5	4	41.7	2	55.6
Resident	1	10.0	0	.....	1	27.8
Bradenton						
Recorded	2	22.5	1	15.6	1	40.0
Resident	2	22.2	1	14.9	1	43.5
Clearwater						
Recorded	2	14.8	1	9.3	1	35.7
Resident	1	8.2	0	.....	1	37.0
Coral Gables						
Recorded	2	31.7	2	31.7	0	.....
Resident	2	23.3	2	23.3	0	.....
DeLand						
Recorded	1	8.8	0	.....	1	30.3
Resident	1	9.3	0	.....	1	31.3
Ft. Myers						
Recorded	2	12.6	1	8.1	1	27.8
Resident	0	.....	0	.....	0	.....
Lake Worth						
Recorded	1	15.9	1	16.7	0	.....
Resident	2	37.0	2	38.5	0	.....
Miami Beach						
Recorded	0	.....	0	.....	0	.....
Resident	0	.....	0	.....	0	.....
Ocala						
Recorded	3	15.2	1	8.6	2	24.4
Resident	1	6.0	0	.....	1	12.5
Palatka						
Recorded	4	29.9	0	.....	4	69.0
Resident	2	16.1	0	.....	2	33.9
Panama City						
Recorded	5	29.9	4	28.6	1	37.0
Resident	4	28.8	3	25.4	1	47.6
Plant City						
Recorded	1	4.5	1	6.4	0	.....
Resident	1	4.5	1	6.3	0	.....

BUREAU OF VITAL STATISTICS

Cities 5,000 to 10,000 Population—(Continued)

CITIES	Maternal Deaths	Per 1,000 Births	White M. Deaths	Per 1,000 Births	Col. M. Deaths	Per 1,000 Births
River Junction						
Recorded	0	....	0	....	0	....
Resident	0	....	0	....	0	....
Sarasota						
Recorded	1	5.7	0	....	1	20.0
Resident	1	6.1	0	....	1	20.4
Winter Haven						
Recorded	1	7.0	1	9.3	0	....
Resident	1	7.3	1	9.4	0	....

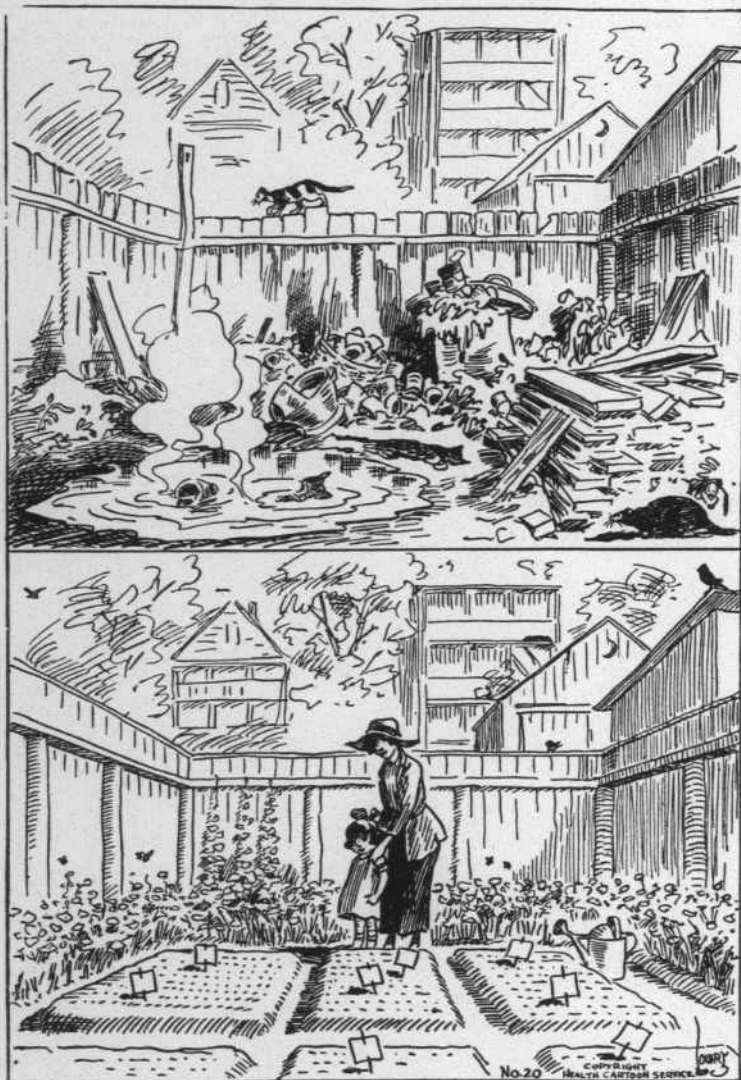
Cities 2,500 to 5,000 Population

CITIES	Maternal Deaths	Per 1,000 Births	White M. Deaths	Per 1,000 Births	Col. M. Deaths	Per 1,000 Births
Apalachicola						
Recorded	0	....	0	....	0	....
Resident	1	18.5	1	31.3	0	....
Arcadia						
Recorded	2	15.4	2	18.9	0	....
Resident	1	9.4	1	11.6	0	....
Avon Park						
Recorded	0	....	0	....	0	....
Resident	0	....	0	....	0	....
DeFuniak Springs						
Recorded	0	....	0	....	0	....
Resident	1	18.2	1	23.3	0	....
Eustis						
Recorded	0	....	0	....	0	....
Resident	0	....	0	....	0	....
Fernandina						
Recorded	1	27.0	0	....	1	76.9
Resident	1	22.2	0	....	1	76.9
Ft. Pierce						
Recorded	3	26.5	2	24.1	1	33.3
Resident	2	18.2	1	12.5	1	33.3
Haines City						
Recorded	0	....	0	....	0	....
Resident	0	....	0	....	0	....
Hialeah						
Recorded	0	....	0	....	0	....
Resident	0	....	0	....	0	....
Hollywood						
Recorded	0	....	0	....	0	....
Resident	0	....	0	....	0	....
Kissimmee						
Recorded	0	....	0	....	0	....
Resident	0	....	0	....	0	....

BUREAU OF VITAL STATISTICS Cities 2,500 to 5,000 Population—(Continued)

CITIES	Maternal Deaths	Births Per 1,000	White M. Deaths	Per 1,000 Births	Col. M. Deaths	Per 1,000 Births
Lake City						
Recorded	2	22.2	0	....	2	55.6
Resident	2	23.5	0	....	2	55.6
Lake Wales						
Recorded	1	10.8	1	15.6	0	....
Resident	2	21.5	1	15.2	1	37.0
Leesburg						
Recorded	1	10.0	1	15.4	0	....
Resident	1	12.3	1	21.7	0	....
Live Oak						
Recorded	0	....	0	....	0	....
Resident	0	....	0	....	0	....
Manatee						
Recorded	0	....	0	....	0	....
Resident	0	....	0	....	0	....
Marianna						
Recorded	0	....	0	....	0	....
Resident	0	....	0	....	0	....
Melbourne						
Recorded	1	23.3	1	41.7	0	....
Resident	0	....	0	....	0	....
New Smyrna						
Recorded	0	....	0	....	0	....
Resident	0	....	0	....	0	....
Palmetto						
Recorded	0	....	0	....	0	....
Resident	0	....	0	....	0	....
Perry						
Recorded	0	....	0	....	0	....
Resident	0	....	0	....	0	....
Pompano						
Recorded	2	30.3	0	....	2	37.0
Resident	2	28.6	0	....	2	36.4
Quincy						
Recorded	3	30.6	3	75.0	0	....
Resident	1	10.8	1	27.8	0	....
Sebring						
Recorded	0	....	0	....	0	....
Resident	0	....	0	....	0	....
Tarpon Springs						
Recorded	0	....	0	....	0	....
Resident	0	....	0	....	0	....
Wauchula						
Recorded	0	....	0	....	0	....
Resident	0	....	0	....	0	....
Winter Park						
Recorded	0	....	0	....	0	....
Resident	0	....	0	....	0	....

Is Your Back Yard a Menace



Or a Blessing?

HUMAN LIFE IS THE STATE'S GREATEST ASSET

FLORIDA



HEALTH NOTES

OFFICIAL MONTHLY BULLETIN

ESTABLISHED JULY, 1892

STATE BOARD OF HEALTH

JACKSONVILLE, FLORIDA

Entered as Second Class Matter, October 27, 1921

at the Postoffice at Jacksonville, Florida, Under the Act of August 24, 1912

This Bulletin will be sent to any address in the State free of charge.

Vol. 26

NOVEMBER, 1934

No. 11

Edited by

STEWART G. THOMPSON, D. P. H., Member
American Medical Editors' and Authors' Assn.

ARTICLES

STAINING METHODS—*Eaton*

PREVENT DEAFNESS — *Brink*

CHEMICAL WATER ANALYSES—*Lenert*

FLORIDA PUBLIC HEALTH MEETING—*Hanson*

PUBLIC HEALTH NURSING STANDARDS—*Mettinger*

MALARIA DEATHS AND DEATH RATES, 1933—*Thompson*

HENRY HANSON, M. D., STATE HEALTH OFFICER
Also Executive Officer and Secretary of Board

BOARD MEMBERS

N. A. Baltzell, M. D., Pres.
MariannaHarry Dash Johnson, M. D.
Daytona BeachR. L. Hughes, M. D.
Bartow

STATE HEALTH OFFICER

Also Executive Officer and Secretary of Board

Henry Hanson, M. D.

BUREAUS AT JACKSONVILLE

DIRECTORS

Laboratories.....	Paul Eaton, M. D., D. P. H.
*Vital Statistics.....	Stewart G. Thompson, D. P. H.
Communicable Diseases.....	F. A. Brink, M. D.
Engineering.....	Louva G. Lenert
Public Health Nursing.....	Ruth E. Mettinger, R. N.
Accounting.....	G. Wilson Baltzell
Librarian.....	Elizabeth Bohnenberger
*Registration Inspector.....	Anna C. Emmons
Drug Store Inspector.....	M. H. Doss
Assistant Drug Store Inspector.....	Frank S. Castor

LABORATORIES

Jacksonville.....	Pearl Griffith, B. E.
Miami.....	E. R. Powell
Pensacola.....	Johnette McCormick
Tallahassee.....	Estelle Bryan
Tampa.....	H. D. Venters, B. S.

MEDICAL OFFICERS

DeFuniak Springs.....	C. W. McDonald, M. D.
Inverness.....	Leland H. Dame, M. D.
Jacksonville.....	Thos. E. Morgan, M. D.
Jacksonville.....	W. A. Claxton, M. D.*
Tallahassee.....	H. A. McClure, M. D.
Tampa.....	C. W. Pease, M. D.

*(And Tuberculosis Clinician)

DISTRICT SANITARY OFFICERS

Milton.....	T. S. Kennedy, M. D.
Ocala.....	C. A. Holloway
Orlando.....	Russell Broughman
West Palm Beach.....	S. D. Macready
On "FERA" Duty.....	Fred A. Safay

PUBLIC HEALTH NURSES

Jacksonville.....	Inure Elv, R. N. (Asst. Director)
Lake City.....	Johanna L. Sogaard, R. N.
Marianna.....	Alia Mary Goggans, R. N.
Tampa.....	Julia O. Graves, R. N.

MALARIA RESEARCH

Tallahassee.....	Mark F. Boyd, M. D. (Rockefeller Foundation)
------------------	---

MALARIA CONTROL STUDIES

Jacksonville.....	T. H. D. Griffiths, M. D. (U. S. Public Health Service)
-------------------	--

CONSULTANT IN ENTOMOLOGY

Orlando.....	W. V. King, Ph. D. (U. S. Bureau Entomology)
--------------	---

DIRECTORS FULL TIME COUNTY HEALTH UNITS

Tallahassee, Leon County.....	L. J. Graves, M. D.
Pensacola, Escambia County.....	W. A. McPhaul, M. D.

ADMINISTRATION**Henry Hanson, M.D., State Health Officer****PUBLIC HEALTH WORKERS TO MEET IN JACKSONVILLE**

The sixth annual meeting of the Florida Public Health Association will take place in Jacksonville on the 3rd, 4th, and 5th of December. The meeting will be held in the Mayflower Hotel and all who are interested in the preservation of the public health are invited to attend. The program is, as usual, one full of interesting and important papers, many of which are by leading authorities from various states of the Union. Those of our distinguished guests who have attended previous meetings have been highly complimentary in their comments on the character of the programs offered by the Florida Public Health Association. This year seems to be no exception to this rule.

The object of these meetings is to get all the people who are engaged in public health work together for a conference and exchange of ideas. The person who is working by himself in the field often wishes for the opportunity to discuss problems met in the daily routine with someone and get his advice about handling them. Also the administrative staffs of the State Board of Health and some of the cities, who have attended one or more meetings of a national character during the year, will have interesting facts to impart to those who by virtue of their subordinate positions do not have opportunity to attend the national meetings.

The following is a brief summary of the program which will be presented this year:

The members and guests will register Monday morning, December 3rd, from 9 A. M. on throughout the meeting.

The meeting will be called to order at 9.30 A. M. by the President, Dr. J. R. McEachern, City Health Officer of Tampa, and will be formally opened by an invocation by Rev. Albert Kissling, Pastor of the Riverside Presbyterian Church. At 9.40 the Association will be greeted by words of welcome from the genial mayor of the city, Hon. John T. Alsop. Next will be a greeting from the manager of Jacksonville's Chamber of Commerce, Mr. J. T. Daniels, to be followed by a welcoming address by Dr. N. A. Upchurch, City Health Officer.

After the words of welcome from the above there will be a response by President McEachern, immediately following which he will deliver his presidential address. This will be a feature of leading interest as Dr. McEachern has practiced medicine in this State for many years, has served in the Legislature and had opportunity to note the development of the public health movement in Florida almost from the very first. After the presidential address, there will be a report on "Pulmonary Spirochetosis," by Dr. George Attwood,

ADMINISTRATION

Health Officer of Waycross, Georgia, and then we will hear from our good friend, Dr. J. R. McCord, Professor of Obstetrics at Emory University, on the very important topic of "Syphilis in Pregnancy." An address on "County Health Units," by Dr. C. C. Applewhite of the United States Public Health Service, closes the morning session. In the afternoon, there will be a general session for a paper on "Public Health Nursing," by Miss Pearl McIver, of the United States Public Health Service, to be followed by an Institute for public health nurses. At 3.00 P. M. there will be a round table session on problems of sanitary engineering, to which all interested are invited.

At 7.30 P. M. there will be a public session at which we expect to have Dr. Richard Strong of the Harvard School of Tropical Medicine. Dr. Strong is one of the charter members of the American Academy of Tropical Medicine. It is also expected that Dr. Ira Hiscock of Yale University will be here, and Dr. Walter H. Eddy of Columbia University to give a popular talk on nutrition. After the public session, at 9 P. M. there will be a reception and dance for members and guests.

Tuesday morning will open with a paper on "Epidemiology" by Dr. C. D. Hopkins of the Tampa City Health Department, followed by a discussion of the recent dengue epidemic by Dr. George N. MacDonell, City Health Officer of Miami; and Dr. T. H. D. Griffiths, of the United States Public Health Service and Director of the Malaria Control Studies of the State Board of Health. This will be followed by a paper by H. N. Parker, Director of the Laboratory and Food Division of the Jacksonville City Board of Health. Next will come the interesting paper by Dr. William DeKleine, Medical Director of the National Red Cross, on "Pellagra and Depression." After this, Miss Mabel Berry has been asked to speak on "Social Service and the Public Health Program." Miss Berry has created a very favorable impression with her sound outlook and attitude toward the medical relief program.

Dr. L. L. Williams, Director of the Division of Field Studies in Malaria for the United States Public Health Service, will give an address on "The FERA and Malaria Control Activities." In the afternoon, there will be a continuation of the Institute for nurses, and there will be field demonstrations for the sanitary engineers. At 7.30 the annual banquet will be held at which Dr. C. W. Stiles will act as toastmaster. There will be short talks by leading guests and the Duval County Medical Society is especially invited to the banquet.

Wednesday morning will start with a meeting of the Board of Directors, after which the scientific program will be resumed at 9.30 A. M. with a paper which commands the most lively interest at the present time; namely, "The Screw Worm Situation in Florida."

ADMINISTRATION

by Dr. W. V. King of the United States Bureau of Entomology and Consultant in Entomology to the Florida State Board of Health. Next there will be a paper by Dr. W. E. Dove, also of the United States Bureau of Entomology, on "Progress in Sand Fly Control Studies." After this, there will be a paper on "Fluctuations in Maternal Mortality," by Dr. W. F. Lunsford, Statistician of the State Board of Health of Missouri.

At 11.30 A. M., business meeting and election of officers.

At 1 P. M., the annual luncheon of the State Board of Health Employees. At this meeting, the State Health Officer has a special message of interest to all State Board of Health workers.

At 2.00 P. M. there will be a session on the new National Milk Ordinance. Vital questions will come up for discussion, of interest both to health workers and to dairymen. Mr. Leslie C. Frank and Mr. Ernest J. Kelly have been asked to attend, and to delegate personnel to the meeting. In addition to the above, it is expected that Dr. V. H. Bassett of Savannah will be here, and Dr. E. L. Bishop, President of the American Public Health Association, as well as representatives of the Rockefeller Foundation. **You are invited to attend.**

BUREAU OF PUBLIC HEALTH NURSING

Ruth E. Mettinger, R.N., Director

PUBLIC HEALTH NURSING STANDARDS

Under the supervision of the State Board of Health, 246 FERA nurses have been employed and placed on duty, one or more in each county of the State. Their duties include both preventive and curative service. It is necessary for these nurses to spend a portion of their time performing the duties of a public health nurse and a portion in giving bedside care to the sick, incidentally teaching a member of the family the simple methods of ministering to the needs of the invalid.

Public health nursing is not an isolated activity but is intimately related to every health and social activity in the State. Many of the nurses now employed came without public health training and experience, but under the tutelage of the trained supervisors and by diligent attention and study, they are acquiring knowledge of public health nursing technique. The work of the public health nurse is different from that of the private duty nurse in many respects. For example, the private duty nurse goes into the home on invitation,

BUREAU OF PUBLIC HEALTH NURSING

for a definite purpose and under the instruction of an attending physician; while the public health nurse must gain admission and ascertain by tactful inquiry the health needs of the family, then seek the means of supplying those needs. Furthermore, the families which she visits for the most part have no voice in the selection of the nurse. With this in mind, every public health nurse should use tactful approach, good nursing technique and should not lose an opportunity for health teaching, as well as instruction through demonstrations. The nurse should watch carefully for other family health problems. Therefore, it is obvious that a nurse should have special preparation before accepting a position in public health.

Briefly stated, the public health nurse to meet the required standards of our national organization and of the State Board of Health must have at least a high school education or its equivalent. Second, she must be a graduate of an accredited training school connected with a general hospital having a daily average of 50 patients or more. The curriculum should include practical experience in caring for men, women and children, together with theoretical and practical instruction in medical, surgical, obstetrical, and pediatric nursing. Third, she must be registered in the State in which she is working. Fourth, she must have one year's experience on a well-organized, daily-supervised public health nursing staff. Fifth, she must have four, preferably nine, months of theoretical study in public health nursing in one of our universities which is recognized by the national organization. Occasional exceptions may be made where the nurse does not meet the academic and fundamental nursing standards. However, she should have had one year's experience under adequate supervision and proved her ability before being appointed to a position where she works alone. In rural work the nurse does better justice to herself, to her profession, and to the community if she has both the theory and experience.

Many of these Federal Emergency Relief nurses under the supervision of the State Board of Health have rendered and are rendering service of such recognized value that interested and public-spirited citizens and officials are laying plans and looking about for the means whereby the public health nursing service may be continued when and if Federal funds cease to be available. When such a time comes, it should be borne in mind that only energetic nurses with public health training and experience or those willing to take a course in public health nursing should be employed. The State Board of Health keeps itself informed as to available applicants and has the means of determining the qualifications of nurses seeking employment in public health. The full coöperation of this Bureau is at the disposal of communities seeking to establish permanent public health nursing services and invites conferences with representatives wishing to establish such a service.

BUREAU OF ENGINEERING**Louva G. Lenert, Director****CHEMICAL WATER ANALYSES**

An opportunity now presents itself for obtaining for a limited time a complete chemical analysis of any water supply in the State of Florida.

Requests are received from time to time by the water laboratory of the Bureau of Engineering for chemical analyses. Complete bacteriological examinations are made as routine procedure, free to any citizen of the State, but laboratory equipment and personnel are too limited to permit complete chemical analyses on the same basis even though it is felt that the service is very desirable and means should be provided for carrying this on.

In 1923, the Bureau and the United States Geological Survey in a coöperative program collected and examined 458 water samples from various sources throughout the State, the results of which were published by the Survey and reprinted by the Florida State Board of Health.

The information obtained is no longer complete, many new supplies having been installed since its publication and changes having occurred in the older supplies so that the data are now misleading.

Up to this time it has been necessary for the municipality, company or individual to have this work done by a commercial laboratory at what may appear to be a prohibitive cost, or dependence must be placed on the laboratories maintained by manufacturers of water treatment equipment.

Through the efforts of the Bureau and the Florida Section of the American Water Works Association, arrangements have been made with a very reliable commercial laboratory in Jacksonville to have complete chemical analyses made of all water samples submitted through the Bureau at a very nominal charge, this being but a fraction of the amount which it is necessary to ask for single examinations.

In order that the information obtained shall be as nearly uniform and as complete as possible, an effort will be made to include samples from all supplies even though recent chemical determinations have been made by other laboratories. The results obtained by chemists who do not specialize in water analyses are not always comparable.

All examinations under this program will be made in conformity with Standard Methods for the Examination of Water and Sewage prepared by a joint committee from the American Public Health Association and the American Water Works Association.

Those who wish to avail themselves of the opportunity of having a complete chemical analysis made may secure full particulars by communicating direct with the Bureau of Engineering, State Board of Health, Jacksonville, Florida.

BUREAU OF ENGINEERING

TOURIST CAMPS

The new list of permitted tourist camps numbering over 200 will be sent to any address free upon request.

Permits are issued by the Bureau only to those camps which comply with the rules and regulations of the State Board of Health. The regulations should be termed as minimum requirements only. Many camp operators have come to realize that the regulations are merely a protection and do not constitute a top standard with which to be content.

Quality tourist camps, the owners of which take into consideration extra comforts, such as good sleeping equipment, individual sanitary appliances and aesthetic features such as fresh paint and proper landscaping, are being rewarded with overflowing patronage with little advertisement except by tourist to tourist, while the camp owner who is content with what the law requires is still waiting for wayfarers who become stranded near his place or who find other more acceptable camps filled to overflowing.

Experience shows that there is a definite place for tourist camps and the wide-awake operator finds he must please the customer as well as comply with the law.

BUREAU OF COMMUNICABLE DISEASES

F. A. Brink, M.D., Director

PREVENT DEAFNESS

Few of us with good hearing realize the extent of the difficulties which confront those who have partially or completely lost this faculty. Their embarrassment, their handicap, is greater and more difficult to overcome than the average person would suspect. Two definite aids for the hard of hearing are now offered. Lip reading is being taught and it is very helpful to the partially deaf. It may be the only method of conversation for those who are totally deaf and sensitive about the use of the pad and pencil. Amplifiers for individual or group use are offered by several reliable makers. They come with attachments for either bone or air conduction and prove to be very useful. Telephone amplifiers are available; they are installed by the telephone companies at an additional monthly cost.

To appreciate the importance of the hearing problem, one need but realize that one person in eight has impaired hearing. In the

BUREAU OF COMMUNICABLE DISEASES

United States there are some seventeen million persons—three million of them children—who do not hear normally. Some of these have a form of deafness that is congenital or hereditary and therefore not preventable, but in the majority the deafness is due to preventable causes and in many other cases the deafness itself could have been prevented or minimized by proper medical or surgical care.

Foreign bodies or a plug of ear-wax in the outer ear canal will cause temporary impairment of hearing. Much loud noise as in a boiler factory causes boilermakers' deafness.

The most common cause of impaired hearing is middle ear disease—congestion or inflammation of the small cavity just inside the ear drum. In this cavity is a chain of three small bones which transmit sound waves to the inner ear. Their joints become stiffened by the inflammation so that they transmit the sound waves but poorly. The lining membranes of the cavity are thickened and hardened and the perception of sound is further reduced.

The Eustachian tube connects the middle ear with the back part of the throat. Through it the air pressure is equalized on the two sides of the ear drum. Normally it affords drainage to the middle ear cavity but if obstructed as by adenoids or an inflammation at the lower or throat end, then trouble is likely to start in the middle ear. Earache is one of the common signs of this trouble which, if neglected, is likely to cause deafness. It is better to call a doctor to deal with this situation than await the rupture of the ear drum. Often an incision which gives drainage will effect prompt relief and be followed by rapid recovery.

Diphtheria, scarlet fever, measles, whooping cough, adenoids, tonsilitis and colds, with the associated throat inflammation, are frequently the cause of impaired hearing. That is just one more reason for preventing these diseases if possible and for having skilled medical treatment for sick children rather than depend on home remedies, patent medicines or quack doctors.

Many general practitioners of medicine prefer not to deal with disorders of the ear. They will quickly refer their patients to a competent specialist whose aid will be sought at once by the wise parent. The family doctor can serve well his patients with permanent impairment of hearing by placing them in touch with sources of aid for the hard of hearing.

League for the Hard of Hearing

Numerous associations have been formed to promote the interests of those with impaired hearing. The membership is not limited but includes anybody who wishes to join. Many of these local leagues have joined forces and organized the American Federation of Or-

BUREAU OF COMMUNICABLE DISEASES

ganizations for the Hard of Hearing, with headquarters at 1537 35th Street, Washington, D. C.

There are six local organizations in Florida, located at Jacksonville, Tampa, Miami, St. Petersburg, Orlando, and Ocala. Membership in one of these organizations brings many benefits, not only in the way of learning lip reading through organized classes and in becoming familiar with the best hearing aids (ear phones) but there is much added to life through various games, amusements, entertainment, lectures and sociability. If there is no local league for the hard of hearing, then membership may be had in the national organization which publishes a very useful bulletin and helps in numerous other ways.

Adjustment of deafened children to their environment depends to a great extent on the attitude of parents and teachers who can be of great help to those with slight to moderate impairment. Special attention should be given their health and education but pampering or "babying" is harmful.

Reading material on this subject can be borrowed from the State Board of Health Library, Jacksonville.

BUREAU OF LABORATORIES

Paul Eaton, M.D., D.P.H., Director

STAINING METHODS

We are frequently asked why we put certain colored solutions on the slides which we prepare for examination under the microscope. The answer is, of course, that the staining or dyeing of the specimens renders them more easily discoverable or helps to distinguish them from other kinds of structures.

It has been known from time immemorial that certain substances were capable of imparting color to certain other substances. For example, the "royal purple" of classic allusion was obtained from some sort of shellfish. Indigo was once widely cultivated in our own region and the red in the French soldier's uniform came from a dye known as madder, made from a plant. The discovery of the possibility of obtaining brilliant colors from coal tar, made by the Englishman, Perkins, in the 1860's, ruined the indigo and madder business but gave the world a variety and brilliancy of color it never knew before.

It was not long until it was found that one dye might produce two or more different colors when applied to two different substances such as silk and linen, or silk and cotton, even when these materials were woven into the same piece of cloth. In microscopy

BUREAU OF LABORATORIES

it was found that certain organic structures which were apparently homogeneous could be shown by dyeing with aniline dyes to be heterogeneous; that is to say, "not the same all the way through."

Then it was shown that certain germs or microbes which looked all alike when viewed undyed, could be separated into certain classes according to the way or ways in which they were affected by certain dye solutions. Uninstructed persons are apt to think that it ought to be as easy to tell a germ which causes disease from a harmless germ, under the microscope, as to distinguish a horse from a dog with the unaided eye. Unfortunately, the matter is not quite so simple as that.

An attempt will be made next month to make this matter a little plainer.

SUMMARY OF WORK DONE IN THE LABORATORIES OF
THE STATE BOARD OF HEALTH DURING THE
MONTH OF SEPTEMBER, 1934

	Jacksonville	Tampa	Pensacola	Miami	Tallahassee	Total
Animal Parasites.....	2684	1020	177	113	80	4074
Diphtheria	1050	331	71	348	16	1806
Typhoid	1401	294	57	73	241	2066
Malaria	3507	409	68	51	21	4056
Rabies	10	3	—	1	—	14
Tuberculosis	244	107	29	43	19	442
Gonorrhea	953	355	74	144	49	1575
Kahn	6194	2517	272	1434	299	10716
Water	—	64	2	210	—	276
Milk	370	395	131	243	48	1197
Miscellaneous	483	34	159	259	—	935
	16896	5529	1040	2919	773	27157

Specimen containers distributed.....15603

BIOLOGICAL PRODUCTS DISTRIBUTED

Diphtheria Antitoxin.....	10,000 units	124 Packages
	5,000 units	28 Packages
Schick.....		5130 Tests
Toxoid.....		3069 C. C.
Typhoid Vaccine.....		4637 Treatments
Vaccine Virus.....		2612 Capillaries
Tetanus Antitoxin.....	1,500 units	12 Packages
Antirabic Virus.....		12 Treatments

BUREAU OF VITAL STATISTICS

Stewart G. Thompson, D.P.H., Director

Deaths from Malaria, Recorded, Resident, and Rates per 100,000
Population, by Color, by Counties, Florida, 1933

COUNTIES	Total Deaths	Rate per 100,000 Pop.	White Deaths	Rate per 100,000 Pop.	Col. Deaths	Rate per 100,000 Pop.
STATE						
Recorded	373	24.0	207	18.8	166	36.8
Resident	364	23.4	200	18.1	164	36.4
Alachua						
Recorded	11	30.2	9	44.3	2	12.4
Resident	10	27.5	8	39.4	2	12.4
Baker						
Recorded	0	—	0	—	0	—
Resident	1	15.4	1	21.7	0	—
Bay						
Recorded	5	40.7	3	33.0	2	62.5
Resident	5	40.7	3	33.0	2	62.5
Bradford						
Recorded	2	19.8	2	27.8	0	—
Resident	4	39.6	3	41.7	1	34.5
Brevard						
Recorded	0	—	0	—	0	—
Resident	0	—	0	—	0	—
Broward						
Recorded	3	12.1	2	12.1	1	12.0
Resident	3	12.1	2	12.1	1	12.0
Calhoun						
Recorded	5	67.6	4	64.5	1	83.3
Resident	5	67.6	4	64.5	1	83.3
Charlotte						
Recorded	1	22.2	1	27.8	0	—
Resident	1	22.2	1	27.8	0	—
Citrus						
Recorded	4	71.4	1	25.0	3	187.5
Resident	4	71.4	1	25.0	3	187.5
Clay						
Recorded	1	13.7	0	—	1	58.8
Resident	1	13.7	0	—	1	58.8
Collier						
Recorded	0	—	0	—	0	—
Resident	0	—	0	—	0	—
Columbia						
Recorded	10	68.0	8	86.0	2	37.0
Resident	8	54.4	6	64.5	2	37.0
Dade						
Recorded	1	0.6	1	0.7	0	—
Resident	1	0.6	1	0.7	0	—
DeSoto						
Recorded	2	25.3	2	31.7	0	—
Resident	1	12.7	1	15.9	0	—
Dixie						
Recorded	1	12.8	1	25.0	0	—
Resident	1	12.8	1	25.0	0	—
Duval						
Recorded	12	7.1	10	8.8	2	3.6
Resident	8	4.7	6	5.3	2	3.6

BUREAU OF VITAL STATISTICS

Deaths from Malaria, Recorded, Resident, and Rates per 100,000
Population, by Color, by Counties, Florida, 1933—Continued

COUNTIES	Total Deaths	Rate per 100,000 Pop.	White Deaths	Rate per 100,000 Pop.	Col. Deaths	Rate per 100,000 Pop.
Escambia						
Recorded	4	7.3	3	7.2	1	7.4
Resident	4	7.3	3	7.2	1	7.4
Flagler						
Recorded	1	40.0	1	58.8	0	—
Resident	1	40.0	1	58.8	0	—
Franklin						
Recorded	9	136.4	4	97.6	5	200.0
Resident	9	136.4	4	97.6	5	200.0
Gadsden (Ex.)*						
Recorded	16	57.1	4	33.1	12	75.5
Resident	17	60.7	5	41.3	12	75.5
*State Hospital	0	—	0	—	0	—
Gilchrist						
Recorded	7	162.8	7	184.2	0	—
Resident	6	139.5	6	157.9	0	—
Glades						
Recorded	0	—	0	—	0	—
Resident	0	—	0	—	0	—
Gulf						
Recorded	0	—	0	—	0	—
Resident	0	—	0	—	0	—
Hamilton						
Recorded	8	84.6	4	70.5	4	105.8
Resident	9	95.2	5	88.1	4	105.8
Hardee						
Recorded	5	47.2	5	50.5	0	—
Resident	8	75.5	8	80.8	0	—
Hendry						
Recorded	0	—	0	—	0	—
Resident	0	—	0	—	0	—
Hernando						
Recorded	2	39.2	1	27.0	1	71.4
Resident	3	58.8	2	54.1	1	71.4
Highlands						
Recorded	0	—	0	—	0	—
Resident	0	—	0	—	0	—
Hillsboro						
Recorded	15	8.6	12	8.5	3	9.1
Resident	12	6.9	9	6.4	3	9.1
Holmes						
Recorded	8	62.0	8	63.5	0	—
Resident	7	54.3	7	55.6	0	—
Indian River						
Recorded	0	—	0	—	0	—
Resident	0	—	0	—	0	—
Jackson						
Recorded	21	65.2	8	40.2	13	105.7
Resident	21	65.2	8	40.2	13	105.7
Jefferson						
Recorded	26	193.9	10	233.2	16	175.4
Resident	26	193.9	10	233.2	16	175.4

BUREAU OF VITAL STATISTICS

Deaths from Malaria, Recorded, Resident, and Rates per 100,000 Population, by Color, by Counties, Florida, 1933—Continued

COUNTIES	Total Deaths	Rate per 100,000 Pop.	White Deaths	Rate per 100,000 Pop.	Col. Deaths	Rate per 100,000 Pop.
Lafayette						
Recorded	3	68.2	2	54.1	1	142.9
Resident	3	68.2	2	54.1	1	142.9
Lake						
Recorded	3	11.3	0	—	3	41.1
Resident	4	15.1	1	5.2	3	41.1
Lee						
Recorded	2	11.6	0	—	2	46.5
Resident	2	11.6	0	—	2	46.5
Leon						
Recorded	19	75.4	10	91.7	9	62.9
Resident	16	63.5	7	64.2	9	62.9
Levy						
Recorded	10	75.2	5	61.0	5	98.0
Resident	10	75.2	5	61.0	5	98.0
Liberty						
Recorded	2	49.2	2	75.6	0	—
Resident	2	49.2	2	75.6	0	—
Madison						
Recorded	20	128.1	7	94.5	13	158.5
Resident	19	121.7	7	94.5	12	146.3
Manatee						
Recorded	3	12.0	1	5.7	2	26.7
Resident	3	12.0	1	5.7	2	26.7
Marion						
Recorded	28	89.2	14	85.9	14	92.7
Resident	28	89.2	14	85.9	14	92.7
Martin						
Recorded	1	16.7	0	—	1	41.7
Resident	1	16.7	0	—	1	41.7
Monroe						
Recorded	0	—	0	—	0	—
Resident	0	—	0	—	0	—
Nassau						
Recorded	4	42.7	1	18.2	3	77.2
Resident	4	42.7	1	18.2	3	77.2
Okaloosa						
Recorded	0	—	0	—	0	—
Resident	0	—	0	—	0	—
Okeechobee						
Recorded	0	—	0	—	0	—
Resident	0	—	0	—	0	—
Orange						
Recorded	0	—	0	—	0	—
Resident	0	—	0	—	0	—
Osceola						
Recorded	1	8.5	1	12.3	0	—
Resident	1	8.5	1	12.3	0	—
Palm Beach						
Recorded	5	8.0	4	9.5	1	4.9
Resident	2	3.2	1	2.4	1	4.9

BUREAU OF VITAL STATISTICS

Deaths from Malaria, Recorded, Resident, and Rates per 100,000
Population, by Color, by Counties, Florida, 1933—Continued

COUNTIES	Total Deaths	Rate per 100,000 Pop.	White Deaths	Rate per 100,000 Pop.	Col. Deaths	Rate per 100,000 Pop.
Pasco						
Recorded	1	9.0	0	-----	1	62.5
Resident	2	18.0	1	10.5	1	62.5
Pinellas						
Recorded	6	8.2	5	8.4	1	7.6
Resident	6	8.2	5	8.4	1	7.6
Folk						
Recorded	13	15.7	9	13.9	4	22.0
Resident	13	15.7	9	13.9	4	22.0
Putnam						
Recorded	12	62.5	8	72.1	4	49.4
Resident	12	62.5	8	72.1	4	49.4
St. Johns						
Recorded	1	4.9	0	-----	1	13.5
Resident	1	4.9	0	-----	1	13.5
St. Lucie						
Recorded	0	-----	0	-----	0	-----
Resident	0	-----	0	-----	0	-----
Santa Rosa						
Recorded	1	7.0	1	8.2	0	-----
Resident	1	7.0	1	8.2	0	-----
Sarasota						
Recorded	3	19.9	2	16.9	1	30.3
Resident	3	19.9	2	16.9	1	30.3
Seminole						
Recorded	7	33.0	1	8.5	6	63.2
Resident	6	28.3	1	8.5	5	52.6
Sumter						
Recorded	6	52.2	2	25.0	4	114.3
Resident	5	43.5	2	25.0	3	85.7
Suwannee						
Recorded	15	95.4	6	57.7	9	168.7
Resident	16	101.7	7	67.3	9	168.7
Taylor						
Recorded	7	51.1	6	69.8	1	19.6
Resident	7	51.1	6	69.8	1	19.6
Union						
Recorded	2	24.7	2	40.8	0	-----
Resident	2	24.7	2	40.8	0	-----
Volusia						
Recorded	9	18.4	3	8.6	6	43.2
Resident	9	18.4	3	8.6	6	43.2
Wakulla						
Recorded	2	35.7	1	29.4	1	45.5
Resident	3	53.6	2	58.8	1	45.5
Walton						
Recorded	4	26.0	2	16.0	2	69.0
Resident	4	26.0	2	16.0	2	69.0
Washington						
Recorded	3	24.4	1	10.2	2	80.0
Resident	3	24.4	1	10.2	2	80.0



HUMAN LIFE IS THE STATE'S GREATEST ASSET

FLORIDA



HEALTH NOTES

OFFICIAL MONTHLY BULLETIN

ESTABLISHED JULY, 1892

STATE BOARD OF HEALTH
JACKSONVILLE, FLORIDA

Entered as Second Class Matter, October 27, 1921

at the Postoffice at Jacksonville, Florida, Under the Act of August 24, 1912

This Bulletin will be sent to any address in the State free of charge.

Vol. 26

DECEMBER, 1934

No. 12

Edited by

STEWART G. THOMPSON, D. P. H., Member
American Medical Editors' and Authors' Assn.

ARTICLES

STAINS—*Eaton*

CERTIFIED OYSTERS—*Lenert*

TUBERCULOSIS CONTROL—*Brink*

TUBERCULOSIS PREVENTION—*Hanson*

TUBERCULOSIS CASE FINDING—*Mettinger*

TUBERCULOSIS MORTALITY, 1933—*Thompson*

HENRY HANSON, M. D., STATE HEALTH OFFICER
Also Executive Officer and Secretary of Board

BOARD MEMBERSN. A. Baltzell, M. D., Pres.
MariannaHarry Dash Johnson, M. D.
Daytona BeachR. L. Hughes, M. D.
Bartow**STATE HEALTH OFFICER**

Also Executive Officer and Secretary of Board

Henry Hanson, M. D.

BUREAUS AT JACKSONVILLE**DIRECTORS**

Laboratories.....	Paul Eaton, M. D., D. P. H.
*Vital Statistics.....	Stewart G. Thompson, D. P. H.
Communicable Diseases.....	F. A. Brink, M. D.
Engineering.....	Louva G. Lenert
Public Health Nursing.....	Ruth E. Mettinger, R. N.
Accounting.....	G. Wilson Baltzell
Librarian.....	Elizabeth Bohnenberger
*Registration Inspector.....	Anna C. Emmons
Drug Store Inspector.....	M. H. Doss
Assistant Drug Store Inspector.....	Frank S. Castor

LABORATORIES

Jacksonville.....	Pearl Griffith, B. E.
Miami.....	E. R. Powell
Pensacola.....	Johnette McCormick
Tallahassee.....	Estelle Bryan
Tampa.....	H. D. Venters, B. S.

MEDICAL OFFICERS

DeFuniak Springs.....	C. W. McDonald, M. D.
Inverness.....	Leland H. Dame, M. D.
Jacksonville.....	Thos. E. Morgan, M. D.
Jacksonville.....	W. A. Claxton, M. D.*
Tallahassee.....	H. A. McClure, M. D.
Tampa.....	C. W. Pease, M. D.

*(And Tuberculosis Clinician)

DISTRICT SANITARY OFFICERS

Milton.....	T. S. Kennedy, M. D.
Ocala.....	C. A. Holloway
Orlando.....	Russell Broughman
West Palm Beach.....	S. D. Macready
On "FERA" Duty.....	Fred A. Safay

PUBLIC HEALTH NURSES

Jacksonville.....	Joyce Ely, R. N. (Asst. Director)
Lake City.....	Johanna L. Sogaard, R. N.
Marianna.....	Lalla Mary Goggans, R. N.
Tampa.....	Julia O. Graves, R. N.

MALARIA RESEARCH

Tallahassee.....	Mark F. Boyd, M. D. (Rockefeller Foundation)
------------------	---

MALARIA CONTROL STUDIES

Jacksonville.....	T. H. D. Griffiths, M. D. (U. S. Public Health Service)
-------------------	--

CONSULTANT IN ENTOMOLOGY

Orlando.....	W. V. King, Ph. D. (U. S. Bureau Entomology)
--------------	---

DIRECTORS FULL TIME COUNTY HEALTH UNITS

Tallahassee, Leon County.....	L. J. Graves, M. D.
Pensacola, Escambia County.....	W. A. McPhaul, M. D.

ADMINISTRATION

Henry Hanson, M.D., State Health Officer

TUBERCULOSIS PREVENTION

B U Y
CHRISTMAS
SEALSH E L P
FIGHT
TUBERCULOSIS

Although the tuberculosis death rate in Florida is said to be the lowest for the 14 southeastern states, tuberculosis is nevertheless one of the leading problems of the State. In 1917 the Florida death rate from tuberculosis was 118.9 per 100,000 while the rate for the registration area was then 146.4 and rose in 1918 to 149.1. From that time on there has been a consistent decline in the tuberculosis death rate for the Nation as a whole as well as here in Florida. The Florida rate in 1933 was 66.9 per 100,000 population for the State as a whole and for the white race 36.1 while the colored in this State suffered a mortality of 142.1 per 100,000.

The State Board of Health has always looked upon tuberculosis as one of its major health problems but has felt somewhat handicapped in that the State has had no facilities for removing the most serious sources of infection. I am referring here to the advanced active case among the indigents where the economic condition is such that the family itself can do practically nothing toward making the patient comfortable or adding facilities which might help prevent infection among other members of the family. Young children in such families have practically no opportunity to escape infection. The majority of infections in tuberculosis take place in childhood. The patient with an advanced case, (and this seems to be especially true, the poorer the people are) seems to be careless, almost as though he were seeking company in his misery by spreading infection and adding additional cases in his immediate surroundings. I have felt for a number of years that there should be more stringent regulations for isolation in cases of this type than those for measles, scarlet fever or diphtheria. The consequences in tuberculosis are more serious. Legislation should be enacted which would empower the State Board of Health as well as municipal health departments to forcibly isolate all cases of tuberculosis where the economic condition of the individual or the family is such that adequate care and safeguards cannot be provided. It is hoped that the present agitation for a sanatorium will bear fruit. Such sanatorium should have provision both for treatment of the incipient or curable cases and isolation of the advanced cases which are a menace to the public as spreaders of infection. It is also hoped that we may be able to carry out the suggestion of the Social Service Director of securing an adequate fund, something like \$10,000, to defray the expense of early diagnosis in tuberculosis through the aid of X-ray films. It is often necessary to have the assistance of the

ADMINISTRATION

X-ray in order to determine whether or not a child has incipient tuberculosis.

Inasmuch as this is the season when the Christmas seals are again on sale, I wish to urge that each one buy seals as liberally as consistent with his financial circumstances. The income from the seal sale money is used by the Tuberculosis Association to supplement the activities of the Health Department.

BUREAU OF LABORATORIES

Paul Eaton, M.D., D.P.H., Director

STAINS

B U Y
CHRISTMAS
SEALS



H E L P
FIGHT
TUBERCULOSIS

If you put a drop of a solution of alum on a new linen handkerchief, the moistened spot will be dyed a different color from the untreated part, by certain dyes. This general principle is known as "mordanting," which comes from a Latin word meaning "to bite." The "mordant" causes the dye to "bite" or take hold in a peculiar fashion.

This same "mordanting" principle is used extensively in the staining of tissues and parasites to facilitate their study under the microscope. Many different mordants are used. Alum, carbolic acid, and iodine are among the most frequently used.

A red or a blue dye may stain a certain kind of bacteria very beautifully but not be able to resist the solvent action of alcohol unless it has been "mordanted" into the bodies of the bacteria by the use of carbolic acid. This principle is the basis of the most commonly used method of staining the organisms which are associated with tuberculosis.

There is a green dye used for staining diphtheria bacilli which when "mordanted" with iodine causes certain portions of the bacterial bodies to turn a "fast black," thereby enabling the technician to distinguish between true diphtheria bacilli and certain other forms that resemble them closely and are likely to be mistaken for them.

Then it is possible to use different colors of dye in the same solution. In the study of malaria we make use of a mixture of red and blue dyes that stain one part of the malaria parasite red and another part blue or purple.

Several large volumes could be written about staining biologic tissues, without covering what is known. Discoveries are constantly being made, so you will see that the subject has not been exhausted.

BUREAU OF LABORATORIES

SUMMARY OF WORK DONE IN THE LABORATORIES OF
THE STATE BOARD OF HEALTH DURING THE
MONTH OF OCTOBER, 1934

	Jacksonville	Tampa	Pensacola	Miami	Tallahassee	Total
Animal Parasites.....	5297	2356	432	213	138	8436
Diphtheria	1647	494	53	2038	38	4297
Typhoid	1579	165	60	88	29	1921
Malaria	2837	406	110	46	355	3754
Rabies	4	1	—	1	—	6
Tuberculosis	358	191	17	49	17	632
Gonorrhea	989	339	75	164	109	1676
Kahn	9613	3048	554	2080	459	15754
Water	—	47	24	218	—	289
Milk	305	313	91	570	68	1347
Miscellaneous	575	25	180	302	13	1095
	23231	7385	1596	5769	1226	39207

BUREAU OF COMMUNICABLE DISEASES

F. A. Brink, M.D., Director

TUBERCULOSIS CONTROL

During the past four years a tuberculosis control program has been carried on throughout the State of Florida jointly by the State Board of Health and the Florida Tuberculosis & Health Association. The City of Miami and the Duval County Welfare Board maintain regular clinics to which patients come voluntarily or are referred by physicians and public health nurses. Any effort at case finding and early diagnosis of tuberculosis among contacts or in any group of individuals requires a well organized staff and a very definite program of activity, the purpose of which should be to promote tuberculin testing of children to be followed by X-ray examinations of the reactors and examinations of adults for the adult type of tuberculosis.

Tuberculosis, like any other type of communicable disease, is transmitted from one individual to another by direct contact or by food and articles contaminated with the infectious discharge of a patient. A person who has what is called "open tuberculosis," that is, one who is discharging tubercle bacilli in his sputum, is the greatest disseminator of the disease. It is through him, chiefly, that other persons become infected and develop the disease. The idea that certain houses in which cases of tuberculosis have occurred are

B U Y
CHRISTMAS
SEALS



HELP
FIGHT
TUBERCULOSIS

BUREAU OF COMMUNICABLE DISEASES

responsible for the development of other cases has been supplanted by the certain knowledge that transmission is more direct from person to person and the greatest danger is from the contact of children with patients in the household suffering with open tuberculosis. A patient with open tuberculosis discharges daily in his sputum millions of tuberculosis germs. Many of them are projected into the air in the fine spray which he discharges every time he coughs and these may be inhaled directly by other members of the family or may fall on the floor, furniture, bedding, dishes and other objects and then be taken into the mouths of others in the home. It is, therefore, most important that care be taken to forestall this means of spreading infections and to seek any new case among the supposedly well members of the family.

In its onset, tuberculosis is insidious. Any child may inhale tuberculosis germs and develop the childhood type of tuberculosis and show no symptoms of the disease. This type is rarely fatal and the child may go along for years without developing any evidence of the disease. However, it is among these infected children that new cases appear perhaps ten or twenty years after the infection has taken place. It is of great importance to discover these infections early in order that the health of the infected children may be guarded and the development of the adult type of tuberculosis may be prevented. There are then, two important control measures: (1) Patients with the open or active case of adult tuberculosis should be found, examined and instructed so that they may, so far as possible, avoid infecting their associates and that they may start as soon as possible to take the cure in order, if possible, to recover from the disease. (2) A search must be made among the contacts of these active cases in order to discover infections among persons who have not yet developed active tuberculosis so that they may, by living properly, avoid developing the disease.

The success of these control measures is proportional to the number of adult cases discovered because when the adult open case has been found we are able to proceed with the examination of exposed children and provide proper hygienic care for them. The Tampa City Health Department has instituted just such a program. At the first diagnostic clinic thirty contact children were brought in and tested. Ten of these gave a positive tuberculin reaction and two were found, on X-ray examination, to have the childhood type of tuberculosis. A great number of such regular local clinics are necessary. The main difficulty in this connection has been found to be the cost of the X-ray work. The State Board of Health has been able to make some progress along this line because of the fact that the Florida Tuberculosis & Health Association has furnished the films and the funds to pay a relatively small fee to radiologists who have made the exposures and developed the films for a price which

BUREAU OF COMMUNICABLE DISEASES

barely covers the cost of materials. The Association has obtained the funds for this work through the sale of Christmas seals.

The need for tuberculosis hospital facilities becomes more and more apparent each day. Hospitalization helps in the control program by reason of: (1) isolation of patients with active tuberculosis and many tuberculosis germs in the sputum, (2) the education of the patients, relatives and general public and (3) restoring the curable patients to usefulness and rendering them non-infectious.

BUREAU OF PUBLIC HEALTH NURSING

Ruth E. Mettinger, R.N., Director

TUBERCULOSIS CASE FINDING

B U Y
CHRISTMAS
SEALS



HELP
FIGHT
TUBERCULOSIS

The individual with tuberculosis should be the concern of the entire community. Every person with the disease is a potential spreader of infection. Therefore, the most essential part in the control of tuberculosis is to find the case. In finding cases there are two methods of approach:

1. List the known active cases and seek for secondary cases among both adults and children.
2. Tuberculin test the children, follow the reactors into the home and try to find the previous case in an adult, living or dead.

Since the children are infected by an adult the follow-up visit into the home is of vital importance. Too much attention cannot be given to the indirect causative factor; namely, the influence of environment.

A home visit for investigation is of little value unless there is some provision for:

1. Diagnostic service
2. Continued medical and nursing supervision
3. Improving living conditions, diet, rest, fresh air, and isolation
4. Preventorium or hospital care when indicated

The nurse plays a very important part, not only in case finding but in the care of the patient and giving advice under the doctor's instructions. The utmost tact should be exercised in approaching the subject of tuberculosis when making the actual investigation. Care should be taken to gain the confidence of persons interviewed to make it clear that the purpose of the investigation is to be helpful and not to embarrass or annoy. It is not the duty of the nurse to

BUREAU OF PUBLIC HEALTH NURSING

decide who in the household has the disease but after gaining the confidence of the family she can persuade them to attend the clinic or go to their physician.

Case finding work fits well into a generalized public health nursing program and the nurse should be alert at all times for evidence of either the adult or childhood type. When visiting the prenatal case or instructing the mother in regard to the diet of a poorly nourished child found during school inspections, she may learn that grandmother is living in the household and suffering with chronic tuberculosis disguised as asthma, bronchitis, or heart disease; or she may find, living next door where the children are frequent visitors, an active case of tuberculosis. Adults are not as susceptible as children, though occasionally we find an adult in a household who has contracted the disease from another. When trying to learn the source of infection, it should be borne in mind that this may have happened years ago, as persons infected during childhood carry the bacilli encapsulated in the lungs for years, only to have them emerge from their dormant state when the person becomes overworked or run down.

Tuberculosis is quite prevalent among negroes, and since most infections are acquired in childhood, it very often comes from the servants. Even on careful investigation the real source of infection may not be revealed. Consciously or unconsciously, many persons seek to escape what they regard as the stigma of tuberculosis by concealing important data.

The most important measure for the control of tuberculosis is isolation of the patient. If this cannot be done an effort should be made to reduce the closeness of contact. The patient should have a separate room; no children should sleep in the same room; the dishes the patient uses should be kept separate and boiled. The patient should be trained to cover his mouth when coughing. For this purpose soft paper napkins or sheets of toilet paper should be kept within reach so that the patient may put a piece of this over his mouth quickly when he coughs. This paper may be put in a paper bag. Each day's accumulation is to be burned.

Into every home visit and every interview, the investigator should inject something of educational value:

1. Teach the fact that tuberculosis is communicable.
2. Teach the fact that it can be prevented.
3. Teach the technique of prevention.
4. Teach the proper diet for the patient and well members of the family.
5. Teach the need of medical supervision.

BUREAU OF ENGINEERING**Louva G. Lenert, Director****CERTIFIED OYSTERS****B U Y**
CHRISTMAS
SEALS**HELP**
FIGHT
TUBERCULOSIS

Oyster season is here again. The coming of cooler weather always brings a heavy demand for this excellent food which has almost become a staple article in the better markets and grocery stores.

The production of good oysters, suitable for human consumption, is not the simplest of procedures and bargain hunters had better save money on purchases in which health hazards are not involved. For the protection of the consumer and the upbuilding of the oyster industry a system of certification has been devised which protects both interests. Under this system every producer of oysters operates under a certificate number which accompanies every shipment of oysters sent out from his place of business.

Oysters sent in the shell are bagged or boxed and each shipment bears an original numbered tag issued by the State Board of Health which gives the name and address of the shipper, name and address of the consignee, together with the name of the State of origin and the certificate number of the shipper and the amount of the shipment. Any consignment of shellstock not conforming to these conditions is of doubtful origin and will not be used by anyone but a gambler in health.

Shucked oysters are sent out from the house of a certified dealer only in sealed, non-returnable containers bearing the certificate number which has been issued to him by the State Board of Health. The most common container in use is the friction top metal can, sealed with a crimp which prevents its re-use after opening. In order that the consumer may be reasonably certain that the oysters being dispensed by markets and grocery stores are from certified sources, the retailer is required to keep oysters in their original container. There is no harm in holding oysters, properly iced, in the metal cans, and there is danger of substitution when porcelain or earthenware crocks are used. Any adulteration with water or ice is prohibited (the United States Food and Drug Administration holds that more than 5% water in oysters indicates adulteration). A common subterfuge of unscrupulous dealers is to add water or ice, or pack ice so that it will without their knowledge (?) melt into the container. In this way, the aggregate volume may be increased to create an apparent bargain price.

Oysters, an article of food often consumed in the raw state, should be considered in the same class as safe milk. Shippers of oysters are compelled by competition to offer them at a minimum price and

BUREAU OF ENGINEERING

any reduction beyond this means operating at a loss or dropping the standard by shipper or retailer.

The State Board of Health and the local health departments are constantly on the alert, but the consumer must coöperate in his own protection by insisting that he receive certified oysters from original containers without dilution.

A list of dealers, certified in Florida, is given below. Those marked for local trade only indicate dealers who are permitted to engage in oyster handling only in their immediate retail trade area and may not ship out of this territory. Other dealers are certified to engage in interstate as well as intrastate business, though shellstock dealers are not permitted to ship or sell shucked oysters.

SHELLFISH DEALERS IN THE STATE OF FLORIDA AS
CERTIFIED BY THE STATE BOARD OF HEALTH
DECEMBER 1, 1934

Dealer	Address	Certificate No.
*J. K. Whaley and Company	Arran	FLA-1
Standard Fish and Oyster Co.	Apalachicola	FLA-3
United Sea Foods Company	Apalachicola	FLA-4
Sanitary Sea Foods Company	Apalachicola	FLA-5
Acme Packing Co. (also trading as Rice Bros. & Seafoods Prod. Co.)	Apalachicola	FLA-6
Green Point Fish & Oyster Co.	Apalachicola	FLA-7
Apalachicola Oyster Farms, Inc.	Apalachicola	FLA-8
Apalachicola Fish & Oyster Co.	Apalachicola	FLA-10
J. O. Anderson & Co.	Apalachicola	FLA-11
Reliable Fish & Oyster Co.	Apalachicola	FLA-12
White Star Fish & Oyster Co.	Milton	FLA-14
West Point Oyster Co.	Apalachicola	FLA-15
**John Miller	Fernandina	FLA-16
City Sea Food Market	Apalachicola	FLA-18
Klarer Oyster Company	Amelia City	FLA-19
Gerbing Oyster Farms	Amelia City	FLA-20
Millers Point Fish & Oyster Co.	Crystal River	FLA-22
I. C. Nedley	Port St. Joe	FLA-23
*East Milton Fish & Oyster Co.	Milton	FLA-24
**E. G. Longe	Port Orange	FLA-28
*Long Bend Company	Milton	FLA-25
*J. L. Parker & Co.	Port Orange	FLA-27
**Adam Freeman	Port Orange	FLA-29
*J. W. Youngblood	South Port	FLA-30
Hodges Oyster House	Cedar Key	FLA-31
*W. F. Scurlock	Southport	FLA-32
*Lynn Haven Fish Co.	Lynn Haven	FLA-33

BUREAU OF ENGINEERING

Dealer	Address	Certificate No.
A. L. Tucker Oyster Co.	East Point	FLA-34
Cultivated Oyster Farms Corp.	Apalachicola	FLA-35
East Bay Oyster Company	Pensacola	FLA-36
E. L. Lolley	East Point	FLA-38
Wilson Brothers	Apalachicola	FLA-39
Atlantic Oyster Co.	Port St. Joe	FLA-40
A. P. Sessions	St. Marks	FLA-42
*Miller Fish & Oyster Co.	Apalachicola	FLA-43
Gulf Fish & Oyster Co.	Pensacola	FLA-47
John Metcalf	Panacea Springs	FLA-50
Raymond Weekley	Milton	FLA-53
Rogers Oyster House	Homosassa	FLA-55
Moore Fish & Oyster Co. (formerly Gulf Trading Co.)	Carrabelle	FLA-56
R. F. Brannan	East Point	FLA-58
Clyde W. Jones	Port St. Joe	FLA-59
Eleven Mile Oyster Co.	Apalachicola	FLA-61
Coons Oyster House	Niceville	FLA-62
George Benton's Oyster House	St. Marks	FLA-67
Franklin Fish & Oyster Co.	Apalachicola	FLA-72
*South Port Oyster Club	South Port	FLA-80
Milton Fish & Oyster Co.	Milton	FLA-81
W. E. Sands Oyster Co.	Port Orange	FLA-83
Summer Haven Products Co.	Summer Haven	FLA-87
**Wilson Oyster Plant (Amelia River Bridge)	Fernandina	FLA-88
J. O. Bragdon Oyster Co.	Port St. Joe	FLA-91
*Reeder & Son	South Port	FLA-92
G. W. Segree Oyster Co.	East Point	FLA-93
Cedar Key Oyster House	Cedar Key	FLA-95
Pratt Oyster House	Homosassa	FLA-97
Eubanks Fish & Oyster Co.	Crystal River	FLA-98
Sweet Bay Oyster House	Cedar Key	FLA-99
**R. W. Joyner	Jacksonville	FLA-106
**F. F. Meyers (Spring Hammock)	Jacksonville	FLA-107
**Poor Joe's Oyster Shop	Pensacola	FLA-112
**Theodore Clapes	Pensacola	FLA-114
**Garden D. Fish Market	Pensacola	FLA-116
*Spring Creek Fish Co.	Wakulla	FLA-124
*T. R. Courtney	Pace	FLA-139
Live Oak Island Fishery	Tallahassee	FLA-140
**B. E. Parker	Port St. Joe	FLA-141
*E. N. Newsom	Lynn Haven	FLA-142
D. C. Spears	Crawfordville	FLA-143

*Shellstock only.

**Local trade only.

BUREAU OF VITAL STATISTICS

Stewart G. Thompson, D.P.H., Director

Deaths from Tuberculosis (all forms), Recorded, Resident, and Rates per 100,000 Population, by Color, by Counties, Florida, 1933

COUNTIES	Total Deaths	Rate per 100,000 Pop.	White Deaths	Rate per 100,000 Pop.	Col. Deaths	Rate per 100,000 Pop.
STATE						
Recorded	1039	66.9	398	36.1	641	142.1
Resident	1045	67.2	397	36.0	648	143.7
Alachua						
Recorded	24	65.9	8	39.4	16	99.4
Resident	24	65.9	8	39.4	16	99.4
Baker						
Recorded	4	61.5	1	21.7	3	157.9
Resident	5	76.9	2	43.5	3	157.9
Bay						
Recorded	1	8.1	1	11.0	0	-----
Resident	2	16.3	2	22.0	0	-----
Bradford						
Recorded	5	49.5	4	55.6	1	34.5
Resident	5	49.5	4	55.6	1	34.5
Brevard						
Recorded	4	27.0	0	-----	4	83.3
Resident	5	33.8	0	-----	5	104.2
Broward						
Recorded	11	44.4	4	24.2	7	84.3
Resident	13	52.4	5	30.3	8	96.4
Calhoun						
Recorded	1	13.5	1	16.1	0	-----
Resident	2	27.0	2	32.3	0	-----
Charlotte						
Recorded	2	44.4	2	55.6	0	-----
Resident	2	44.4	2	55.6	0	-----
Citrus						
Recorded	1	17.9	0	-----	1	62.5
Resident	1	17.9	0	-----	1	62.5
Clay						
Recorded	2	27.4	1	17.9	1	58.8
Resident	1	13.7	1	17.9	0	-----
Collier						
Recorded	1	28.6	0	-----	1	90.9
Resident	1	28.6	0	-----	1	90.9
Columbia						
Recorded	10	68.0	6	64.5	4	74.1
Resident	5	34.0	1	10.8	4	74.1
Dade						
Recorded	114	65.3	52	37.4	62	174.6
Resident	112	64.1	47	33.8	65	183.1
DeSoto						
Recorded	6	75.9	5	79.4	1	62.5
Resident	4	50.6	3	47.6	1	62.5
Dixie						
Recorded	3	38.5	0	-----	3	78.9
Resident	3	38.5	0	-----	3	78.9
Duval						
Recorded	199	117.9	42	37.0	157	284.4
Resident	201	119.1	42	37.0	159	288.0

BUREAU OF VITAL STATISTICS

Deaths from Tuberculosis (all forms), Recorded, Resident, and Rates per 100,000 Population, by Color, by Counties, Florida, 1933—Continued

COUNTIES	Total Deaths	Rate per 100,000 Pop.	White Deaths	Rate per 100,000 Pop.	Col. Deaths	Rate per 100,000 Pop.
Escambia						
Recorded	19	34.6	11	26.6	8	59.3
Resident	20	36.4	11	26.6	9	66.7
Flagler						
Recorded	3	120.0	2	117.6	1	125.0
Resident	3	120.0	2	117.6	1	125.0
Franklin						
Recorded	3	45.5	0	—	3	120.0
Resident	3	45.5	0	—	3	120.0
Gadsden (Ex.)*						
Recorded	23	82.1	5	41.3	18	113.2
Resident	23	82.1	5	41.3	18	113.2
*State Hospital	35	897.4	14	636.4	21	1235.3
Gilchrist						
Recorded	0	—	0	—	0	—
Resident	0	—	0	—	0	—
Glades						
Recorded	3	103.4	1	52.6	2	200.0
Resident	3	103.4	1	52.6	2	200.0
Gulf						
Recorded	0	—	0	—	0	—
Resident	0	—	0	—	0	—
Hamilton						
Recorded	5	52.9	1	17.6	4	105.8
Resident	5	52.9	1	17.6	4	105.8
Hardee						
Recorded	6	56.6	4	40.4	2	285.7
Resident	6	56.6	4	40.4	2	285.7
Hendry						
Recorded	0	—	0	—	0	—
Resident	0	—	0	—	0	—
Hernando						
Recorded	4	78.4	3	81.1	1	71.4
Resident	4	78.4	3	81.1	1	71.4
Highlands						
Recorded	8	73.4	3	39.5	5	151.5
Resident	9	82.6	4	52.6	5	151.5
Hillsboro						
Recorded	114	65.4	53	37.5	61	185.4
Resident	116	66.6	56	39.6	60	182.4
Holmes						
Recorded	3	23.3	3	23.8	0	—
Resident	3	23.3	3	23.8	0	—
Indian River						
Recorded	5	64.1	2	36.4	3	130.4
Resident	5	64.1	2	36.4	3	130.4
Jackson						
Recorded	14	43.5	3	15.1	11	89.4
Resident	14	43.5	3	15.1	11	89.4
Jefferson						
Recorded	8	59.7	2	46.6	6	65.8
Resident	8	59.7	2	46.6	6	65.8

BUREAU OF VITAL STATISTICS

Deaths from Tuberculosis (all forms), Recorded, Resident, and Rates per 100,000 Population, by Color, by Counties, Florida, 1933—Continued

COUNTIES	Total Deaths	Rate per 100,000 Pop.	White Deaths	Rate per 100,000 Pop.	Col. Deaths	Rate per 100,000 Pop.
Lafayette						
Recorded	0	-----	0	-----	0	-----
Resident	0	-----	0	-----	0	-----
Lake						
Recorded	25	94.3	12	62.5	13	178.1
Resident	25	94.3	12	62.5	13	178.1
Lee						
Recorded	7	40.5	1	7.7	6	139.5
Resident	7	40.5	1	7.7	6	139.5
Leon						
Recorded	12	47.6	3	27.5	9	62.9
Resident	12	47.6	3	27.5	9	62.9
Levy						
Recorded	6	45.1	0	-----	6	117.6
Resident	6	45.1	0	-----	6	117.6
Liberty						
Recorded	0	-----	0	-----	0	-----
Resident	0	-----	0	-----	0	-----
Madison						
Recorded	11	70.4	1	13.5	10	121.9
Resident	11	70.4	1	13.5	10	121.9
Manatee						
Recorded	14	56.0	6	34.3	8	106.7
Resident	14	56.0	6	34.3	8	106.7
Marion						
Recorded	16	51.0	5	30.7	11	72.8
Resident	15	47.8	5	30.7	10	66.2
Martin						
Recorded	2	33.3	0	-----	2	83.3
Resident	2	33.3	0	-----	2	83.3
Monroe						
Recorded	24	176.2	16	143.8	8	320.6
Resident	24	176.2	16	143.8	8	320.6
Nassau						
Recorded	4	42.7	1	18.2	3	77.2
Resident	5	53.3	1	18.2	4	102.9
Okaloosa						
Recorded	3	29.7	3	32.3	0	-----
Resident	4	39.6	3	32.3	1	125.0
Okeechobee						
Recorded	0	-----	0	-----	0	-----
Resident	1	20.8	1	31.3	0	-----
Orange						
Recorded	28	47.3	10	22.3	18	125.0
Resident	29	49.0	11	24.6	18	125.0
Osceola						
Recorded	7	59.3	5	61.7	2	54.1
Resident	7	59.3	5	61.7	2	54.1
Palm Beach						
Recorded	33	52.5	13	30.7	20	97.6
Resident	34	54.1	13	30.7	21	102.4

BUREAU OF VITAL STATISTICS

Deaths from Tuberculosis (all forms), Recorded, Resident, and Rates per 100,000 Population, by Color, by Counties, Florida, 1933—Continued

COUNTIES	Total Deaths	Rate per 100,000 Pop.	White Deaths	Rate per 100,000 Pop.	Col. Deaths	Rate per 100,000 Pop.
Pasco						
Recorded	5	45.0	3	31.6	2	125.0
Resident	5	45.0	3	31.6	2	125.0
Pinellas						
Recorded	42	57.6	25	41.8	17	129.8
Resident	35	48.0	20	33.4	15	114.5
Polk						
Recorded	35	42.2	17	26.2	18	98.9
Resident	36	43.4	17	26.2	19	104.4
Putnam						
Recorded	19	99.0	3	27.0	16	197.5
Resident	19	99.0	3	27.0	16	197.5
St. Johns						
Recorded	16	78.0	6	45.8	10	135.1
Resident	14	68.3	6	45.8	8	108.1
St. Lucie						
Recorded	2	24.7	2	33.9	0	-----
Resident	3	37.0	3	50.8	0	-----
Santa Rosa						
Recorded	4	28.2	2	16.4	2	100.0
Resident	5	35.2	3	24.6	2	100.0
Sarasota						
Recorded	12	79.5	4	33.9	8	242.4
Resident	13	86.1	5	42.4	8	242.4
Seminole						
Recorded	23	108.5	8	68.4	15	157.9
Resident	27	127.4	11	94.0	16	168.4
Sumter						
Recorded	3	26.1	1	12.5	2	57.1
Resident	4	34.8	1	12.5	3	85.7
Suwannee						
Recorded	5	31.8	2	19.2	3	56.2
Resident	5	31.8	2	19.2	3	56.2
Taylor						
Recorded	3	21.9	0	-----	3	58.8
Resident	4	29.2	1	11.6	3	58.8
Union						
Recorded	12	148.1	0	-----	12	375.0
Resident	13	160.5	1	20.4	12	375.0
Volusia						
Recorded	17	34.8	12	34.3	5	36.0
Resident	15	30.7	10	28.6	5	36.0
Wakulla						
Recorded	0	-----	0	-----	0	-----
Resident	0	-----	0	-----	0	-----
Walton						
Recorded	3	19.5	2	16.0	1	34.5
Resident	3	19.5	2	16.0	1	34.5
Washington						
Recorded	5	40.7	1	10.2	4	160.0
Resident	5	40.7	1	10.2	4	160.0



**THE NATION'S STRENGTH
IS THE NATION'S HEALTH**

The greatest threat to the nation's health is tuberculosis. It is the chief killer of men in industry between the ages of 15 and 45—20,000 men in this group alone die of it every year. No one is safe from the disease until every case has been found and placed under treatment. Help protect yourself and your family by using Christmas Seals on your holiday letters and packages. The funds they provide finance a program of prevention, discovery, and treatment of tuberculosis throughout the entire year.



*The NATIONAL STATE and LOCAL TUBERCULOSIS ASSOCIATIONS
of the UNITED STATES*

BUY CHRISTMAS SEALS

I N D E X

1 9 3 4

Page

-A-

Advantages of Membership in the American Public Health Association	93
Aedes Aegypti Breeding in Catch Basins	147
American Public Health Association- Advantages of Membership	93
An Ounce of Prevention	21
Available Statistics	29

-B-

Bathing and Swimming	72
Blood Pressure	87
Breeding of Aedes Aegypti in Catch Basins .	147
Building Family Records	8

-C-

Camps, Tourist	168
Cancer Mortality - Increase May Not Be Real	92
Cartoons	
A Blue-Ribbon Baby	64
Bill Jones' Narrow Escape	96
Birth and Death Registration Areas, 1933	128
Building Family Records	9
Buy Christmas Seals	192
Give Thanks for Good Health	176
Health, Dollar, Sickness	112
Is Your Backyard a Menace or a Blessing?	160
Page for the Children	48
Public Health is Essential to Prosperity	16
Snapshots of a Man Adding Years to His Life	80
The Health Officer Says	31
The Nation's Strength is the Nation's Health	192
Tooth Factory	144
Vitamin, Vegetable & Co.(Tooth Factory) .	144
Why Not More Life for More People	32
Certified Oysters	185
Chemical Water Analyses	167
Child Health Reading List	132
Civil Works Administration and Ditching Projects	3
Communicable Diseases, Important Facts about	58

I N D E X

1 9 3 4

Page

-C-

Communicable Disease Technique	74
Congenital Syphilis	153
Conservation Contest, Health	3
Control of Tuberculosis	181
Credit Where Credit is Due	120
CWA Nursing Program	68
CWS-SNS-1	35

-D-

Dairy Industry and the State Bd. of Health	99
Deafness, Prevent	168
Dengue	115
Dengue Epidemic, Progress in Control	131
Diphtheria Isolation	39
Ditching and Civil Works Administration Projects	3
Dog Flies	150
Dogs	124
Drainage to Eliminate Anopheles Production	24

-E-

Education (Parent)	106
Educational Value of Tuberculosis Sanatorium	104

-F-

Family Records, Building	8
FERA Nurses' Institute at Tampa	84
Flies, Dog	150
Florida Child and Its Health	51
Fomites	135
For Love or Money	104
Forty Days	56

-H-

Health Conservation Contest	3
Health Officer and the Physician	116
Health Workers to Meet in Jacksonville ..	163
"Hot Dogs"	154

-3-
I N D E X
1 9 3 4

Page

-I-

Important Facts about Communicable Diseases	58
Increase in Cancer Mortality May Not be Real	92
Infant Mortality, 1933	77
Infantile Paralysis	117, 125
Iodized Salt	154

-J-

Joke	83
Joy of Living	127

-L-

League for the Hard of Hearing	169
Let's Try Thinking	88
Library	20, 68
Logical Thinking	37

-M-

Malaria and Anti-Malaria Drainage	23
Malaria Control and the FERA	59
Malaria, To Prevent	125
Marshburn, Dr. E. R.	59
Maternal Mortality	67
Maternal Mortality, Some Observations	10
Maternity and Infancy Program	121
Medical Progress	75
Midwives Institute	148
Midwives, Supervision of (C.H. Purdy)	41
Missed Mosquito Producers	147
Mortality, 1933	62
Mortality, Certain Diseases, 1934	143
Mosquito Producers Missed	147

-N-

National Registration Affairs	126
Nurses' Institute at Tampa	84
Nurse's Part in a Maternity and Infancy Program	121
Nursing Care, Preschool	133
Nursing Program, CWA	68
Nursing Standards, Public Health	165

-4-
I N D E X
1 9 3 4

Page

-0-

Ounce of Prevention	21
Oysters, Certified	185

-P-

Parent Education in a State Dept. of Health	106
Parents Who Prefer Puny Children	125
Parrots, Transportation of	19
Pellagra	59
Personal Liberty	141
Physician and the Health Officer	116
Preschool Nursing Care	133
Prevent Deafness	168
Prevention of Tuberculosis	179
Progress in Control of the Dengue Epidemic	131
Public Health Nursing Standards	165
Public Health Workers to Meet in Jacksonville	163
Puny Children	125

-Q-

Quadratic Equations	108
---------------------------	-----

-R-

Rats	55
Reading List on Child Health for the use of Public Health Nurses	132
Ready for School	137
Red Bugs	136
Registration Affairs, National	126
Relation of the Health Dept. to Private Physicians (J.R. McEachern, M.D.)	45
Responsibility	27
Rickets	124

-S-

Salt, Iodized	154
Sanitary Toilets for Schools	118
Self-Reliance	19
Shellfish Dealers in Florida as Certified by State Board of Health, Dec. 1, 1934 .	186
Some Observations on Maternal Mortality .	10

-5-
I N D E X
1 9 3 4

Page

-S-

Social Hygiene	3
Spice of Life	138
Staining Methods	170
Stains	180
Standing Orders to Nurses	69
Standing Orders for School Nurses	70
State Board of Health and the Dairy Industry	99
Statistics Available	29
Summary of Work done in the Laboratories of the State Board of Health	7, 28, 38, 56, 76, 89 109, 120, 142, 155, 171, 181
Supervision of Midwives (C.H. Purdy)	41
Swimming and Bathing	72
Syphilis, Congenital	153

-T-

Tables and Charts

Deaths from Diphtheria, by Months, Florida, 1934, as compared with Previous Year	143
Deaths from Diseases of Pregnancy, Child- birth and the Puerperal State, by Months, Florida, 1934, as compared with Previous Year	143
Deaths from Diseases of Pregnancy, Child- birth and Puerperal State, Recorded, Resident and Rates per 1,000 Live Births, by Color, by Cities, Florida, 1933 ...	156, 157 158, 159
Deaths from Malaria, by Months, Florida, 1934, as compared with Previous Year .	143
Deaths from Malaria, Recorded, Resident, and Rates per 100,000 Population, by Color, by Counties, Florida, 1933	172, 173 174, 175
Deaths from Pellagra, by Months, Florida, 1934, as compared with Previous Year .	143
Deaths from Tuberculosis (all forms), Recorded, Resident, and Rates per 100,000 Population, by Color, by Counties, Florida, 1933	188, 189 190, 191
Deaths from Typhoid, by Months, Florida, 1934, as compared with Previous Year .	143

-6-
I N D E X
1 9 3 4

Page

-T-

Tables and Charts (Continued)

Infant Mortality - Deaths of Infants Under One Year of Age and Rates per 1,000 Live Births, by Color and by Counties, 1933 .	78,79
Mortality for 1933 as compared with the Previous Year	63
Recorded and Resident Deaths from Automo- bile Accidents and Rates per 100,000 Population, by Counties, Florida, 1933 .	110,111
Venereal Diseases Reported, by States, April, 1934	94,95
The CWS-SNS-1	35
To Prevent Malaria	125
Toilets, Sanitary, for Schools	118
Tourist Camps	168
Transportation of Parrots	19
Tuberculosis	136
Tuberculosis Case Finding	183
Tuberculosis Control	181
Tuberculosis Prevention	179
Tuberculosis Sanatorium	22,104
Typhoid Carriers	40
Typhoid Fever is not Necessary	47

-V-

Vacation Time	86
Venereal Disease Morbidity, by States	94
Venereal Disease Treatment	105

-W-

Water Analyses, Chemical	167
Water Supplies	90,102

-Y-

Your Responsibility	6
---------------------------	---